A COMPARATIVE CASE STUDY OF STUDENT ATTITUDES IN SCHOOLS DIFFERING IN PRODUCTIVITY

By

KENNETH McCARTY MATTHEWS

A DISSERTATION PRESENTED TO THE GRADUATE COUNCIL OF
THE UNIVERSITY OF FLORIDA
IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
DEGREE OF DOCTORATE OF EDUCATION

UNIVERSITY OF FLORIDA

1974

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ACKNOWLEDGMENTS

The writer wishes to express his appreciation to the members of the Doctoral Committee. A special thanks is offered to Dr. Ralph B. Kimbrough, chairman, for his continuous support and expert editorial assistance. To Dr. Michael Y. Nunnery, appreciation is expressed for his persistent efforts to improve the quality of this document.

This study could not have been completed without the assistance and cooperation of many people. A special note of appreciation goes to the school principals, to the assistant principal in the more productive school, and to the director of student activities in the less productive school for their cooperation and assistance. The writer wishes to thank the many students in the two schools for their cooperation and honesty. Appreciation is also expressed to Dane for his companionship during the early morning trips, for his help in the treatment of the data, and for sharing his insights during the many discussions about the two companion studies.

During the months of this study many sacrifices were made by the writer's family. A very special thanks goes to the writer's wife, Frances, for her adjustments and understanding. To his daughter, Kimberly, appreciation is expressed for her patience.

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Abstract of Dissertation Presented to the
Graduate Council of the University of Florida in Partial Fulfillment
of the Requirements for the Degree of Doctor of Education

A COMPARATIVE CASE STUDY OF ATTITUDES IN SCHOOLS DIFFERING IN PRODUCTIVITY

By

Kenneth McCarty Matthews

August, 1974

Chairman: Dr. Ralph B. Kimbrough

Major Department: Educational Administration

The Problem

The major problem of this study was to determine differences in the attitudes of students in two, large, urban, secondary schools differing in academic productivity. In addition, differences between the attitudes of over-achieving and under-achieving students in the pooled sample populations of the two schools were investigated.

The Schools and the Samples

The two schools were matched on the basis of socio-economic status of parents, students' plans for future education, racial composition, size, urbanness, and public tax support base. The target populations were limited to those students who were white, had been enrolled in the same school for three consecutive years,

and completed the Florida State-Wide Twelfth Grade Test.

The sample populations were confined to those students who completed the Student Attitude Scale and signed their names. The sample population of the more productive school was composed of 213 students or 53.4 percent of the target population. In the less productive school the sample population was composed of 136 students or 48.2 percent of the target population.

Instrumentation

The attitudes of students were measured through the administration of the Student Attitude Scale. This scale provided measures of five different dimensions of the attitudes of students. These were: (1) Acceptance of Self, (2) Attitude Toward Fellow Students, (3) Attitude Toward Teachers, (4) Attitude Toward the Principal, and (5) Attitude Toward School as a Whole.

The Florida State-Wide Twelfth Grade Test provided standardized measures of the aptitudes of students and their knowledge of mathematics, natural science, social studies, and English.

Data Treatment

Chi square analyses were performed to test differences between the attitudes of students using .05 as the minimal acceptable level of significance. Auxiliary data obtained from interviews with students were subjected to selective content analysis.

Findings

1. Over-achieving students were found to have significantly more positive attitudes toward teachers than under-achieving students.

2. Female students in the more productive school were found to have significantly more positive attitudes toward their fellow students, toward the principal, and toward school as a whole than female students in the less productive school.

3. Students in the less productive school whose parents had at least a high school education, but less than a four year degree from college were found to have significantly more positive attitudes toward teachers than students in the more productive school whose parents had comparable levels of education.

4. Students in the more productive school were found to have significantly more positive attitudes toward the principal than students in the less productive school at all levels of parents' education.

5. Students in the more productive school whose parents had at least a high school education were found to have significantly more positive attitudes toward school as a whole than students in the less productive school whose parents had comparable levels of education.

Suggestions for Future Study

This study was not of an experimental design, therefore no cause and effect relationships were established. However, the analyses of the Student Attitude Scale and interview data were consistent with the following hypotheses which were suggested for future study.

1. Student human-relations are positive in schools that are characterized as highly productive.

2. Students who have positive attitudes toward teachers achieve at higher levels when they perceive that teachers value academic achievement highly than when they perceive that teachers place a lower value on academic achievement.

3. Teachers who have positive attitudes toward the principal emphasize academic achievement in their classrooms when they perceive that the principal values academic achievement highly.

CHAPTER I

THE PROBLEM

One of the primary functions of public schools is to enable society to perpetuate itself by teaching its youth the skills and values by which a way of life can be continued. All citizens hope schools will produce young adults who have attained skills which will enable them to make meaningful contributions to society. Furthermore, the writer hopes society will make it possible for each individual to make contributions commensurate with his unique talents. Enlightened citizens realize this is possible only to the extent interaction between individuals and society is positive.

Productivity of schools is usually measured by the achievement of students in terms of academic accomplishments. However, the development of positive human-relations between students, teachers, and other adults is a responsibility schools cannot abdicate and society cannot afford to ignore. Through the development of positive human-relations individuals can be assured of the opportunity to make contributions to their society. When negative attitudes toward fellow human beings exist this opportunity has been limited.

Attitudes do not develop in a vacuum. They are learned through human interaction. If students have negative attitudes toward themselves or others it is because they have been learned from other human beings.

While the learning of academic skills is a vitally important part of the educative process it cannot be considered as the only output of schools. Schools must also graduate young adults capable of utilizing their talents for the benefit of society.

Are there differences in the attitudes of students between schools which differ in academic productivity when the schools have been closely matched on characteristics such as: the plans of students for future education, socio-economic status of parents, racial composition, size, and base of public tax support? In this study an exploratory examination of the attitudes of students was made to determine if a more productive school, in terms of academic achievement, also had more positive student human-relations than a less productive school.

Statement of the Problem

The major problem in this study was to determine if there were differences between the attitudes of students in two, large, urban, secondary schools which differed in academic productivity. At the same time, an attempt was made to differentiate between the attitudes of over-achieving students and under-achieving students in the combined populations of the two schools. This study was one of two companion studies completed in the selected schools. The other study of the adult social systems was conducted by William Dane Adkinson.[1]

In this study, answers to three questions were sought. These questions were:

1. Were there differences between the attitudes of over-achieving and under-achieving students?

2. Were there differences between schools in the attitudes of students of the same sex?

3. Were there differences between schools in the attitudes of students whose parents had comparable levels of education?

Delimitations

The populations studied were limited to those students in the two selected schools who were white, enrolled in the twelfth grade, completed the Florida State-Wide Twelfth Grade Test for the 1973-1974 school year, and had been enrolled in the same school for three consecutive years.[2] The target populations were limited to 399 students in the more productive school and 282 students in the less productive school. The sample population in the more productive school was confined to 213 students and in the less productive school the sample population was confined to 136 students. The data were limited to those available from the permanent records of students, those which could be obtained on a questionnaire, and the responses given by students in interviews.

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[1] William Dane Adkinson, "An Exploratory Study of the Adult Social Systems of Two Florida Public Secondary Schools Selected on the Basis of a Difference in Productivity," (Ed. D. dissertation, University of Florida, 1974).

[2] The 1973-1974 Florida State-Wide Twelfth Grade Test was a test of academic achievement sponsored by the Office of Testing and Evaluation at the University of Florida.

Limitations

1. The populations selected for this study were not randomly drawn from a larger population. Therefore, generalizations beyond the populations investigated were not warranted.

2. Data collected by questionnaire were limited by the impersonal interaction between the writer and the students included in the population samples.

3. Data collected by interviews were limited by the writer's ability to establish rapport with the students and to elicit honest and complete responses.

4. Time available for this study prohibited investigation of relationships which may have been revealed by a more comprehensive sociological study of the two populations.

5. Since the sample populations in this study were composed of only white students, the findings presented were applicable to only those students classified as white.

Justification for the Study

Studies have been reported in which the relationships between students' self-concept, attitudes toward school, attitudes toward teachers, and their academic achievement were investigated. However, a review of literature did not reveal any studies of relationships between the attitudes of students toward fellow students or toward the principal, within the total social context of the school, and their academic achievement. Rokeach reported that attitudes toward objects are always encountered within some situation about which an attitude also exists and that a minimum condition for social behavior is the interaction of those two attitudes.[1] Therefore, it seems that all dimensions of the social situation (the school) should be considered when attempting to explain the achievement of students in terms of their attitudes.

Even though positive student human-relations are a justifiable goal in themselves, an exploratory study of the attitudes of students and their academic achievement is needed to determine if there is reason to believe that positive attitudes toward fellow students or toward the principal, within the total social context of the school, are related to academic achievement. Regardless of whether the school administrator views student human-relations and student academic achievement as separate and distinct goals or as the interacting components of the educative process, both are concerns of the practicing school administrator. If attitudes toward fellow students or toward the principal are found in future studies to affect the achievement of students, then school administrators should take these factors into consideration when attempting to develop positive student human-relations and high standards of academic achievement.

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[1] Milton Rokeach, Beliefs, Attitudes, and Values, A Theory of Organization and Change (San Francisco: Jossey-Bass, Inc., 1968), p. 132.

Assumptions

The writer assumed scores on the several sections of the Student Attitude Scale were valid indices of the attitudes of students and that scores on the Florida State-Wide Twelfth Grade Test accurately measured the ability and academic achievement of students.

Definitions

The terms identified below reflect modifications which were necessary for their application in this study.

Student Attitudes

Student attitudes were defined as those responses given by students on the Student Attitude Scale and in interviews.

Achievement Score

The achievement score of students was defined as the total score on the Florida State-Wide Twelfth Grade Test minus the aptitude score on the same test.

Over-Achievers

For the purposes of this study students with equal aptitude scores, within the percentile range of five through ninety-four, were designated as over-achievers if they scored one-half standard deviation or more above the mean achievement score for the total population of the state.

Under-Achievers

For the purposes of this study students with equal aptitude scores, within the percentile range of five through ninety-four, were designated as under-achievers if they scored one-half standard deviation or more below the mean achievement score for the total population of the state.

Academic Productivity

Academic productivity was defined as the ratio of over-achievers to under-achievers.

More Productive School

The more productive school was defined as the school, included in this study, whose academic productivity was greater than that of the less productive school for the 1973-1974 school year. Hereafter, this school will be referred to as School A.

Less Productive School

The less productive school was defined as the school, included in this study, whose academic productivity was smaller than that of the more productive school for the 1973-1974 school year. Hereafter, this school will be referred to as School B.

Overview of Procedures

School A and School B were selected on the basis of a search of data gathered by the Office of Testing and Evaluation at the University of Florida, data reported by the central administrative staff of the school district in which the two schools were located, and interviews with persons knowledgeable of the characteristics of the two schools. These data indicated the schools were comparable in several characteristics commonly associated with academic achievement. (These characteristics are reported under The Selected Schools section immediately following this overview.) However, the schools differed in terms of academic productivity as measured by the ratio of over-achievers to under-achievers.

A questionnaire designed to measure the attitudes of students was administered to all senior students in the two schools. Following the questionnaire administration, a sample of students was interviewed. Questionnaire data were analyzed using the chi square test and interview data were subjected to selective content analysis.

The Selected Schools

The District

The district in which School A and School B were located was one of the larger of Florida's sixty-seven school districts. It had a student enrollment, during the 1973-1974 school year, of more than 100,000 students housed in over 100 school centers. During this same year, the population density of the district was more than 450 people per square mile.

Under Florida's public school tax support system, all public schools within each district have the same base of taxation. Thus, School A and School B had a common base of public tax support for the 1973-1974 school year. The same was true for at least twelve years previous to this study.

The Administration

The administrative organization of the district in which School A and School B were located was such that they operated under the same central administrative staff. At the time of this study the principal of School A was in his fifth year as principal of the school and the principal of School B was in his fourth year.

The Students

The Office of Testing and Evaluation at the University of Florida administered a questionnaire during the 1973-1974 school year in conjunction with its annual state-wide twelfth grade achievement test. This questionnaire was designed to gather data on the future educational plans of seniors and background information on the parents of senior students.

Future educational plans. Information reported by seniors in School A and School B on the state questionnaire revealed that seniors in the two schools had similar plans for future education after graduation from high school as illustrated by the data found in Appendix A.

Parents' occupations. Responses by seniors to the state questionnaire indicated the occupations of the parents of seniors in School A and School B were similar as the data found in Appendix A illustrate.

Parents' education. Data from the Office of Testing and Evaluation at the University of Florida revealed that parents of seniors in School A and School B had similar levels of education. These data are displayed in Appendix A.

Family income. The responses of seniors in School A and School B to the state questionnaire indicated they came from families with similar incomes as illustrated in Appendix A.

Enrollment. Data reported by central office personnel indicated School A and School B had comparable student enrollments, as well as, percentage of the enrollment classified as non-white. The total enrollment, for September 1973, in School A was 2,059 and 1,656 in School B. At the same time the percent of the student enrollment classified as non-white in School A was 6.9 percent, while in School B it was 13.5 percent.

Florida State-Wide Twelfth Grade Test completion rates. The writer gathered data illustrative of additional similarities between the two schools. The number of seniors completing the Florida State-Wide Twelfth Grade Test in October 1973 was 512 in School A and 396 in School B. Of these students, 425 or 83.0 percent in School A and 308 or 77.8 percent in School B had been enrolled in the same school for three consecutive years. The number of white seniors completing the senior test, who had been enrolled in the same school for three consecutive years, was 399 in School A and 282 in School B. In other words, 77.9 percent of the seniors who completed the 1973-1974 senior test in School A were white and had been enrolled in the same school for three consecutive years, while the percent in School B was 71.2.

Academic Productivity of the Schools

Aptitude scores of five through ninety-four were selected for the range used in the identification of over-achievers and under-achievers in an effort to reduce the effects of statistical regression. Students with aptitude scores of zero through four had a lower probability of being under-achievers than those with high aptitude scores. At the same time, students with aptitude scores of ninety-four through ninety-nine had a lower probability of being over-achievers than those with low aptitude scores. Although this range did not fully compensate for the effects of statistical regression, its effectiveness was enhanced when used in conjunction with the method of identifying over-achievers and under-achievers applied in this study. As the reader will recall, over-achievers were defined as those students whose achievement scores were one-half standard deviation or more above the mean achievement score for all students completing the 1973-1974 Florida State-Wide Twelfth Grade Test at each aptitude score and under-achievers were defined as those students whose achievement scores were one-half standard deviation or more below the mean achievement score for the same population of students.

Although School A and School B were comparable in several characteristics commonly associated with academic achievement, their academic productivity, as indicated by the ratio of over-achievers to under-achievers, differed for the 1973-1974 school year. The number of over-achievers in School A was 199, whereas in School B the number of over-achievers was 134. At the same time, the number of under-achievers in School A was 121 and in School B there were ninety-nine under-achievers. The academic productivity of School A, expressed in decimal form, was 1.645, while in School B it was only 1.354. As the reader can see, both schools had more over-achievers than under-achievers. However, School A had 64.5 percent more over-achievers than under-achievers, whereas School B had only 35.4 percent more over-achievers than under-achievers.

Target Populations and Sample Populations

Target Populations

The target populations for this study were limited to white students who were enrolled in the twelfth grade during the 1973-1974 school year, completed the Florida State-Wide Twelfth Grade Test for the 1973-1974 school year, and had attended the same school for three consecutive years. The size of the target population in School A was 399 and in School B it was 282.

Sample Populations

Although the questionnaire was administered to all senior students, the sample populations in the selected schools were limited to those students in the target populations who completed the Student Attitude Scale and signed their names. The size of the sample population for School A was 213 and for School B it was 136. Expressed in a different manner, the sample population in School A was 53.4 percent of the target population and in School B the sample population was 48.2 percent of the target population.

Instrumentation

The Florida State-Wide Twelfth Grade Test

The Florida State-Wide Twelfth Grade Test was designed as a test of academic achievement by Educational Testing Service, Princeton, New Jersey. At the time of this writing the Office of Testing and Evaluation at the University of Florida had sponsored the state-wide testing program for thirty-four consecutive years. The Florida State-Wide Twelfth Grade Test for the 1973-1974 school year was composed of five sections: Aptitude, Mathematics, Natural Sciences, Social Studies, and English. The Aptitude section of this test was designed to measure the ability of students to successfully achieve in high school academic subjects. Each of the other sections was designed to measure the knowledge acquired in the designated disciplines. Scores for this test were reported in the form of percentiles for each of the five sections, plus a total score. The total score was the sum of the percentiles for the Aptitude, Mathematics, Natural Sciences, Social Studies and English sections of the test. The reliability of this test was established by Educational Testing Service as .925 for Aptitude, .909 for Mathematics, .869 for Natural Sciences, .911 for Social Studies, and .932 for English.[1]

The Student Attitude Scale

The Student Attitude Scale was developed by Jean Allen Battle as part of the Kellogg sponsored studies of educational leadership conducted during the 1950s.[2] Part of the University of Florida's responsibility was to study the relationship between leadership qualities and human-relations within the school. Battle's scale was developed to arrive at a measure of the attitudes of students and thereby, the student human-relations within the school. Dr. Vynce Hines, director of the University of Florida's portion of the Kellogg sponsored studies, gave verbal consent for the Student Attitude Scale to be used for the purposes of this study. A copy of the scale developed by Battle is presented in Appendix B.

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[1] Educational Testing Service, Test Analysis, FLORIDA STATE-WIDE TWELFTH GRADE TESTING PROGRAM, VRT (Princeton, New Jersey: Educational Testing Service, April, 1974), p. 2.

[2] Jean Allen Battle, "Techniques for Measuring Certain Student Human Relations" (Ed. D. dissertation, University of Florida, 1954).

The Student Attitude Scale was chosen for this study because: (1) it included items related to the attitudes of students toward their fellow students, teachers, the principal, school as a whole, as well as, the students' acceptance of themselves; (2) it could be administered by persons not highly trained in testing procedures; and (3) it could be administered to large groups of students within one normal class period.

In the development of the Student Attitude Scale it was administered to eighteen sixth, ninth, and twelfth grade classes in four different schools in Florida and to all eleventh and twelfth grade students in a fifth school. Using split half techniques for computing reliability coefficients, Battle found the scale had a reliability coefficient of .884. Validation of the scale consisted of comparing its scores with teacher judgments and by correlation with the scores obtained on Lyman's School Attitude Inventory and Phillip's Measurement of Attitude Toward Self and Others. The coefficients of correlation of the Student Attitude Scale with the School Attitude Inventory and the Measurement of Attitude Toward Self and Others were .64 and .75, respectfully. In most cases, the scores on the Battle scale were also positively correlated with the judgments of teachers.[1]

Data Collection and Treatment

Background Data on Students

Each student's race, sex, and Florida State-Wide Twelfth Grade Test scores were obtained from school records. In those cases where sex or race could not be determined from school records, the information was obtained from the school annual yearbook or from instructional personnel in the schools.

Over-Achievers and Under-Achievers

To identify students in the selected schools who were over-achievers or under-achievers, the mean achievement scores for all students in the state completing the Florida State-Wide Twelfth Grade Test for the 1973-1974 school year for each of the aptitude percentiles of five through ninety-four were computed. The standard deviations from the mean achievement scores were also computed for the same range of aptitude scores. Those students having achievement scores of one-half standard deviation or more above the mean achievement score for the appropriate percentile were designated as over-achievers. Those students with achievement scores one-half standard deviation or more below the mean achievement score for the appropriate aptitude percentile score were designated as under-achievers. The University of Florida's research computer (IBM 370 165), as programmed by William Dane Adkinson, was used in this computational process. A copy of the mean achievement scores and standard deviations from the mean for each of the aptitude percentiles of five through ninety-four are included in Appendix C.

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[1] Ibid., pp. 128-32, 169, 176.

Student Attitude Scale Data

The Student Attitude Scale was administered by senior homeroom teachers in each of the two schools. Prior to the adminstration of the scale, these teachers were given the specific instructions listed below.

1. Do not exert any pressure on any student to complete or sign his name to the questionnaire.

2. Instruct the students to answer those questions referring to the educational levels of parents on the basis of the adult members of the household.

3. Instruct the students to leave the appropriate question blank when only one adult is present in the household.

4. Instruct the students to answer all questions referring to teachers for those teachers they had during the 1973-1974 school year.

5. Instruct the students to mark Mostly False if they disagree with the statement, Mostly True if they agree with the statement, and Half True - Half False if they neither agree nor disagree with the statement.

The scale was administered by the senior homeroom teachers on February 1, 1974 in School A and on February 8, 1974 in School B. On the advice of school personnel, the completed scales were placed in envelopes in each homeroom, delivered to the writer by student representatives to the Student Council in School A, and by student representatives to the Senior Senate in School B. A copy of this questionnaire is included in Appendix D.

The completed scales were transferred to National Computer Systems General Purpose Answer Sheets and from these forms to computer tape. Then, numerical values were assigned to each of the response categories on the Student Attitude Scale. A numerical value of one was assigned to responses of Mostly True, a numerical value of two to responses of Half True - Half False, and a numerical value of three to responses of Mostly False. Blank responses were assigned a numerical value of two. Since all items on the Student Attitude Scale were negative in nature, the numerical values translated negative responses into ones and positive responses into threes. To obtain numerical scores for the several sections of the scale, all item responses within each section of the scale were summed. Therefore, larger numbers reflected more positive attitudes and smaller numbers reflected more negative attitudes. Computer programming for this coding and summing process was performed by William Dane Adkinson, who as mentioned earlier conducted a companion study to the one described here.[1]

Numerical values were also assigned to the response categories of the questions concerning the educational levels of the parents of students. The response categories and the numerical values assigned were as listed below.

1. A numerical value of one was assigned to a response of "less than the sixth grade."

2. A numerical value of two was assigned to a response of "completed the sixth grade, but not the ninth."

3. A numerical value of three was assigned to a response of "completed the ninth grade, but didn't graduate from high school."

4. A numerical value of four was assigned to a response of "graduated from high school, but didn't go on to a business school, trade school or college."

5. A numerical value of five was assigned to a response of "attended some business school, trade school or college, but didn't

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[1] Adkinson, "Adult Social Systems."

graduate from college."

6. A numerical value of six was assigned to a response of "graduated from college, but didn't get a master's degree."

7. A numerical value of seven was assigned to a response of "received a master's degree or higher from college."

In addition, an eighth category of "I don't know" was included. For all blank responses and responses in the eighth category, the permanent records of students were examined to determine the parents' educational levels. In those cases where the records indicated only one parent was present in the home, the missing parent was assigned the same educational level as the parent present. Where no determination could be made as to the educational level of a parent, a numerical value of three was assigned.

The score for the parents' educational levels was computed by summing the numerical values assigned to the mother and father. Therefore, the range of possible parents' education scores was from two through fourteen with larger scores representing higher levels of education and smaller scores representing lower levels of education. A listing of the scores for all students in the sample populations is included in Appendix E.

Chi square analysis was performed to determine differences between the attitudes of over-achievers and under-achievers on each of the five sections of the Student Attitude Scale. These analyses pooled data from the sample populations of School A and School B and used .05 as the minimal acceptable level of significance.

To determine differences between the attitudes of students in School A and School B on the five sections of the Student Attitude Scale chi square analysis was performed for the following groups of students using .05 as the minimal acceptable level of significance.

1. Females.
2. Males.
3. Students with parents' education scores of two through seven.
4. Students with parents' education scores of eight through ten.
5. Students with parents' education scores of eleven through fourteen.

Interview Data

Interviews were conducted by the writer with students representing four separate groups in each school. A total of fifty-two students in the two schools were interviewed. The four groups of students were those listed below.

1. Females with parents' education scores of two through seven.
2. Males with parents' education scores of two through seven.
3. Females with parents' education scores of eleven through fourteen.
4. Males with parents' education scores of eleven through fourteen.

Two students from each of the four groups in each school were interviewed individually. Then, between three and six students from each of the groups named above were interviewed as a group. Students were selected for interviews on the basis that: (1) they did not have the most extreme scores of their group on either the Attitude Toward Teachers or the Attitude Toward the Principal sections of the scale, (2) they were available for interviews at the time the writer was scheduled, and (3) their total scores for the five sections of the Student Attitude Scale were closest to the median total score of their group.

The interview guide was composed of thirteen questions dealing with different aspects of the students' perceptions and attitudes. The response options for these questions ranged from completely open ended responses to a forced choice between two given responses. A copy of the interview guide, along with a summary of the responses given, is included in Appendix F.

Data obtained from interviews were subjected to selective content analysis with emphasis on the subjective interpretation of specific words and phrases given by students in response to the various questions. No other treatment was performed on the data obtained by interviews.

Organization of the Study by Chapters

Chapter I presents the statement of the problem, delimitations, limitations, justification for the study, assumptions, definitions, an overview of the procedures used in the study, and data collection and treatment procedures. A review of literature and research is presented in Chapter II. The analysis of student responses to the Student Attitude Scale is presented in Chapter III. Chapter IV presents the analysis of data collected in interviews with selected students in the two schools. Chapter V presents a summary of the study and a discussion of the findings with suggestions for future study.

CHAPTER II

REVIEW OF LITERATURE AND RESEARCH

Since an understanding of the nature of attitudes was an important aspect of this study, selected literature about attitudes was reviewed. The literature revealed differences of opinion about the nature of attitudes. These differences help explain the diversity of attitude research. For example, considerable variety can be found in studies of the attitudes students have toward themselves.

Within recent years much research has been conducted about the relationship between the achievement of students and numerous variables assumed to be related to academic achievement. A review of all the research about student achievement would run into volumes. Consequently, the research which has been reviewed herein represents those studies most directly related to the problem studied.

This chapter is separated into two major divisions. The first is a review of selected literature about the nature of attitudes. The second presents a sample of research studies of relationships between the attitudes of students and academic achievement with emphasis on those conducted in secondary school settings.

Concluding this chapter is a summary of research findings and implications for future study.

The Nature of Attitudes

Authorities have engaged in much controversy concerning the nature of attitudes. Selected literature was reviewed to identify definitions, characteristics, and structure of attitudes. An effort was also made to determine the relationship between attitudes and motivation. A sample of the results of this review of literature follows.

Definitions of Attitudes

In their definition of attitude. Shaw and Wright attempted to differentiate between attitude and other similar constructs in social psychology. They defined an attitude as:

> . . . a relatively enduring system of affective, evaluative reactions based upon and reflecting the evaluative concepts or beliefs which have been learned about the characteristics of a social object or class of social objects.[1]

Rokeach, however, proposed a somewhat different definition of attitude. He defined an attitude as:

> . . . a relatively enduring organization of beliefs around an object or situation predisposing one to respond in some preferential manner.[2]

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[1] Marvin E. Shaw and Jack M. Wright, Scales for the Measurement of Attitudes (New York: McGraw-Hill Book Company, 1959), p. 3.

[2] Milton Rokeach, Beliefs, Attitudes and Values, A Theory of Organization and Change (San Francisco: Jossey-Bass, Inc., 1968), p. 112.

Sherif and Sherif presented still another definition of attitude. Their definition, which they described as an operational definition, was:

> . . . the individual's set of categories for evaluating a stimulus domain, which he has established as he learns about that domain in interaction with other persons and which relate him to various subsets within the domain with varying degrees of positive or negative affect.[1]

Thus attitudes have been defined as evaluative reactions, organizations of beliefs, and as a set of categories for evaluating a stimulus domain.

Characteristics of Attitudes

Shaw and Wright identified six general characteristics of attitudes.

> 1. Attitudes are based upon evaluative concepts regarding characteristics of the referent object and give rise to motivated behavior.
>
> 2. Attitudes are construed as varying in quality (or strength) on a continuum from positive through neutral to negative.
>
> 3. Attitudes are learned, rather than being innate or a result of constitutional development or maturation.
>
> 4. Attitudes have specific social referents, or specific classes thereof.

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[1] Carolyn W. Sherif and Muzafer Sherif, eds., Attitude, Ego-Involvement, and Change (New York: John Wiley & Sons, Inc., 1967), p. 115.

5. Attitudes possess varying degrees of interrelatedness to one another.

6. Attitudes are relatively stable and enduring.[1]

Sherif and Sherif agreed that attitudes are not innate and are relatively enduring. However, they took the position that attitudes always imply a relationship between a person and an object and this relationship is not neutral, but has motivational-affective properties.[2] Rokeach too, agreed that attitudes are learned and relatively enduring.[3]

Structure of Attitudes

Shaw and Wright limited the theoretical construct of attitude to an affective component, based upon cognitive processes, which is the antecedent of behavior.[4] Sherif and Sherif took the position that attitudes have cognitive, motivational, and behavioral components; however, efforts to separate these components tend to distort the nature of the phenomena.[5] According to Triandis, attitudes not only have three major components, but that the cognitive, affective, and behavioral components are multidimensional.[1]

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[1] Shaw and Wright, Measurement of Attitudes, pp. 6-10.

[2] Sherif and Sherif, Attitude, Ego-Involvement, and Change, p. 112.

[3] Milton Rokeach, "The Nature of Attitudes," in International Encyclopedia of the Social Sciences ed. David L. Sills (The Macmillan Company & The Free Press, 1968), p. 450.

[4] Shaw and Wright, Measurement of Attitudes, pp. 2-3.

[5] Sherif and Sherif, Attitude, Ego-Involvement, and Change, p. 113.

Attitudes and Motivation

Peak reported that attitudes are related to the satisfaction of motives. According to her, attitudes are not only dependent upon motivation, but also play a role in determining motivation. Therefore, attitudes may be referred to as dependent and independent variables. As dependent variables, attitudes are a function of the degree of usefulness of the object or situation for aiding in the attainment of individual goals, or a function of the satisfaction derived from reaching these goals. As independent variables, attitudes affect motivated behavior.[2]

Research on the Relationship of Attitudes to Achievement

As indicated previously, much research has been conducted about the relationship of attitudes to achievement. This research has involved such areas as: (1) satisfaction or dissatisfaction and achievement, (2) parental influences on the attitudes and achievement of students, (3) attitudes toward teachers and achievement, (4) self-concept and achievement, (5) the influences of peers on student achievement, and others. Of some interest is the fact that very little was found about the attitudes of students toward other students or toward the principal and academic achievement.

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[1] Harry C. Triandis, "Toward an Analysis of the Components of Interpersonal Attitudes," in Attitude, Ego-Involvement, and Change eds. Sherif and Sherif, pp. 227-67.

[2] Helen Peak, "Attitude and Motivation," in Nebraska Symposium on Motivation, ed. Marshal R. Jones (Lincoln: University of Nebraska Press, 1955), pp. 150-58.

Satisfaction, Dissatisfaction, and Achievement

Jackson and Getzels selected high school students enrolled in a Midwestern private school to study the relationship between the dissatisfaction of students and achievement. Student satisfaction or dissatisfaction was measured through the use of the Student Opinion Poll. This instrument was reported to measure the attitudes of students toward several aspects of the school. In particular, it was designed to measure student satisfaction or dissatisfaction with teachers, curriculum, the student body, and classroom procedures. Standardized achievement tests, and several tests of intelligence and personality were also used in this study.[1]

Jackson and Getzels found that satisfied and dissatisfied students did not differ in either intellectual ability or academic achievement. However they did conclude that dissatisfied boys seemed to perceive adults as rejecting and lacking in understanding, whereas dissatisfied girls were more self-critical.[2]

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[1] Philip W. Jackson and Jacob W. Getzels, "Psychological Health and Classroom Functioning: A Study of Dissatisfaction With School Among Adolescents," Journal of Educational Psychology 50 (1950): 295-300.

[2] Ibid.

In a study of the attitudes and achievement of 505 eleventh grade students in public schools, Brodie found that satisfied students had higher achievement than dissatisfied students. Brodie used the Student Opinion Poll as a measure of the attitudes of students and the Iowa Test of Educational Development as a measure of achievement. Brodie concluded that a negative attitude on the part of students appeared to have an inhibitory affect on those skills which are emphasized in the classroom, such as ability to interpret reading materials in the natural and social sciences.[1]

Williams used the California Study Methods Survey to measure the attitudes toward school of approximately eighteen hundred high school students enrolled in three public high schools. The California Short-Form Test of Mental Maturity, the California Test Battery (reading and mathematics sections), grade point averages, the Bell Adjustment Inventory, and the Tennessee Self-Concept Scale were used as measures of ability, achievement, and personality.[2]

Williams found that the satisfied and dissatisfied students differed significantly on all dependent measures. In each case, the satisfied group recorded higher ability, achievement, and personality scores. He concluded that when ability was statistically controlled, scholastic attitudes were not determined exclusively by academic success or failure. Personality traits appeared to be intricately related to scholastic attitudes.[1]

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[1] Thomas A. Brodie, Jr., "Attitude Toward School and Academic Achievement," Personnel and Guidance Journal 43 (1964): 375-78.

[2] Robert L. Williams, "Personality, Ability and Achievement Correlates of Scholastic Attitudes," Journal of Educational Research 63 (1970): 401-03.

Parents' Education, Achievement, and Attitudes

In his study of the impact of differing parental educational levels of the achievement, attitudes, aspirations, and expectations of high school seniors, Osborn found that students tended to achieve at a level consistent with the educational level of the parent of the same sex. He also found that the attitudes, aspirations, and expectations of students were related to the educational level of the parent of the same sex.[2]

Osborn used grade point averages and scores on the Iowa Test of Educational Development as measures of achievement. As an indicator of attitude, aspiration, and expectation, a three-item questionnaire was used. Attitudes were indicated by responses to a question referring to how the student perceived his teachers rated his performance as a student. Questions designed as indicators of aspiration and expectation referred to the student's perception of his ability to succeed at higher educational levels and how far he realistically expected to go with formal schooling.[1]

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[1] Ibid.

[2] Michael E. Osborn, "The Impact of Differing Parental Educational Level on the Educational Achievement, Attitude, Aspiration, and Expectation of the Child," Journal of Educational Research 65 (1971): 163-67.

In a monumental study of educational opportunity in the public schools of the United States, Coleman et al. found that for white students in the sixth, ninth, and twelfth grades, the educational level of parents accounted for more variance in verbal achievement than six other home variables commonly associated with student achievement. However, he also found that interest in learning and reading, self-concept, and feelings of control over the environment accounted for more variance in achievement than any other set of variables.[2]

Attitudes Toward Teachers and Achievement

In a study by Bledsoe et al., the Pupil Observation Report and the Scale for Measuring Attitudes Toward Any Teacher was administered to more than four thousand secondary school students. They concluded that the findings of the study revealed a stable, consistent, and positive relationship between the grades received by students and the ratings given by students to teachers.[3]

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[1] Ibid.

[2] James S. Coleman et al., Equality of Educational Opportunity (Washington, D.C.: U.S. Government Printing Office, 1966), p. 301.

[3] Joseph C. Bledsoe, Iva D. Brown, and Arthur D. Strickland, "Factors Related to Pupil Observation Reports of Teachers and Attitudes Toward Their Teachers," Journal of Educational Research 65 (1971): 119-26.

A questionnaire was administered to approximately five hundred secondary school students in five states to ascertain the teacher characteristics and behaviors preferred by students in a study conducted by Buser et al. Although the findings of this study were presented in tabular form with no statistical analysis performed, Buser et al. recommended several hypotheses as guides for teacher behavior. These hypotheses indicated that achieving students reported teacher mannerisms, attendance at extra class activities, availability for out of class discussions, and ability to react favorably to student criticism as more important than low achieving students.[1]

Holtzman and Brown used the Survey of Study Habits and Attitudes questionnaire to determine the relationship between each of the four subsections of the scale and grade point averages of nearly eleven thousand junior and senior high school students. They reported that the correlation between the section designed to measure the attitudes of students toward teachers and grade point averages was .35.[2]

Khan studied the relationship between attitudes toward teachers and academic achievement of 1,038 junior high school students in Florida. He used a modified version of the Survey of Study Habits and Attitudes questionnaire to measure student attitudes toward teachers and the Metropolitan Achievement Test Series as a measure of academic achievement. He found that attitude toward teachers was significantly correlated with achievement for males, but not for females.[1]

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[1] Robert A. Buser, Dean L. Stuck, and John P. Casey, "Teacher Characteristics and Behaviors Preferred by High School Students," Peabody Journal of Education 51 (1974): 119-23.

[2] Wayne H. Holtzman and William F. Brown, "Evaluating the Study Habits and Attitudes of High School Students," Journal of Educational Psychology 59 (1968): 404-09.

In a follow up study of the same population of students, Khan found that the affective variables which were significant predictors of academic achievement in the junior high school were also significant predictors of achievement in the twelfth grade. He reported significant correlations between attitude toward teachers for males of between .22 and .35, while for females the correlations were nonsignificant and ranged from -.04 to .09.[2]

Self-Concept and Achievement

Shaw *et al.* studied the self-concept of bright, under-achieving high school junior and senior students using grade point average as the measure of academic achievement. Self-concepts of the subjects were determined using the Sarbin Adjective Checklist. They reported that male achievers were more positive about themselves than male under-achievers and that female under-achievers tended to have ambivalent self-concepts.[1]

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[1] S. B. Khan, "Affective Correlates of Academic Achievement," *Journal of Educational Psychology* 60 (1969): 216-21.

[2] S. B. Khan, "Affective Correlates of Academic Achievement: A Longitudinal Study," *Measurement and Evaluation in Guidance* 3 (1970): 76-80.

From the analysis of data in the equal educational opportunity study, Coleman et al. reasoned that for students from advantaged backgrounds, self-concepts appeared to be closely related to achievement, whereas for students from disadvantaged backgrounds what they believed about their environment appeared to be closely related to achievement.[2]

Shaw and Alves attempted to verify the findings of an earlier study by Shaw et al. in which bright under-achieving males were found to have more negative self-concepts than bright achieving male students and under-achieving female students were found to have ambivalent self-concepts.[3] In this study the Bills Index of Adjustment and Values was used to measure self-concept instead of the Sarbin Adjective Checklist. The findings reported by Shaw and Alves indicated that male under-achievers had more negative self-concepts than male achievers and that female under-achievers did not differ significantly from female achievers on any of the sections of the Bills Index of Adjustment and Values.[1]

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[1] Merville C. Shaw, Kenneth Edson, and Hugh M. Bell, "The Self-Concept of Bright Underachieving High School Students as Revealed by an Adjective Check List," Personnel and Guidance Journal 39 (1960): 193-96.

[2] Coleman et al., Equality of Educational Opportunity, pp. 319-21.

[3] Shaw et al., "Self-Concept Revealed by an Adjective Check List," pp. 193-96.

Brookover et al., in a study of the self-concept of ability of students over a six-year period, found consistently positive correlations between self-concept of ability and academic achievement, as measured by grade point averages. They also reported that an index of general self-concept was also significantly correlated with school achievement. However, Brookover, et al. attributed this to the correlation between self-concept of ability and general self-concept.[2]

Peers and Achievement

McDill et al. attempted to assess the relative influence of the socio-economic context of the school and the social norms of the school upon academic achievement in mathematics. They used two tests from Project Talent to measure aptitude for abstract reasoning and achievement in mathematics. Included in their sample were more than 20,000 students enrolled in twenty public, coeducational high schools. Proportion of the fathers with some college training was used as an indicator of the socio-economic context of the schools. Among their findings, they reported that socio-economic context (as measured in this study) was an adequate indicator of the normative climate of the schools when they were either high or low on the socio-economic continuum, but not when they were in the middle. McDill et al. also presented the tentative conclusion that:

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[1] Merville C. Shaw and Alves, "The Self-Concept of Bright Academic Underachievers: Continued," Personnel and Guidance Journal 42 (1963): 401-03.

[2] W. B. Brookover, E. L. Erickson, and L. M. Joiner, "Self-Concept of Ability and School Achievement. III: Relationship of Self-Concept to Achievement in High School," United States Office of Education, Cooperative Research Project No. 2831. (East Lansing: Office of Research and Publications, Michigan State University, 1967), pp. 145-46.

> . . . in those schools where academic competition, intellectualism and subject matter competence are emphasized and rewarded by faculty and student bodies, individual students tend to conform to the scholastic norms of the majority and achieve at a higher level.[1]

Coleman, in his study of ten diverse secondary schools in 1957-1958, reported that adolescents were in a state of transition looking back at their parents and forward to their peers. Of 7,515 students sampled 42.7 percent of the boys and 43.7 percent of the girls responded that they would find it harder to break with their friends than to face the disapproval of their parents or teachers. Even so, he concluded that the leading crowd of a school and their behavior was a reflection of the characteristics of the backgrounds from which the dominant population group came.[2]

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[1] Edward L. McDill, Edmund D. Meyers, Jr., and Leo C. Rigsby, "Institutional Effects on the Academic Behavior of High School Students," Sociology of Education 40 (1967): 181-99.

[2] James S. Coleman, The Adolescent Society (New York: The Free Press of Glencoe, 1961), pp. 5, 109.

Summary of Research Findings and Implications for Future Study

The research findings presented suggested that satisfied and dissatisfied students may or may not differ in intellectual ability or achievement. The research also indicated that the attitudes, aspirations, expectations, and achievement of students were related to the educational attainment of the parent of the same sex. In another study the achievement of students was related to the educational level of parents. Some evidence was presented that the achievement of students was associated with the attitudes they had toward their teachers.

The self-concept reported by students was related to their achievement in one study, but another reported that self-concept of ability bore a stronger relationship with achievement. Some data indicated that relationships between self-concept and achievement may be different for students coming from advantaged and disadvantaged backgrounds.

Some evidence was reported that the normative climate of schools may have a measurable influence on the achievement of students above that which is explained by the socio-economic context of the schools.

The review of research provided findings that the self-concept of students, their attitudes toward teachers, and the educational level of their parents were related to academic achievement.

Moreover, the normative climate of the total social system of the school also appeared to influence academic achievement. But what about the attitudes of students toward the principal and toward the other students in the school? Are they related to academic achievement? If so, do schools which differ in academic productivity also differ on these attitude variables?

An exploratory study of the attitudes of students toward themselves, toward fellow students, toward teachers, and toward the principal within the total social situation, the school, is needed. A logical setting for such a study would be in two schools differing in academic productivity, but comparable in other characteristics associated with achievement. Since attitudes are relatively enduring, the total time students have been enrolled in the school should be a consideration when selecting the sample populations.

CHAPTER III

ANALYSIS OF QUESTIONNAIRE DATA

The purpose of this chapter is to present and discuss data collected using the Student Attitude Scale and accompanying parents' education questions. As indicated in Chapter I, the questionnaire was administered to all seniors in both schools, but sample populations were limited to the 213 seniors in School A and the 136 seniors in School B who signed the questionnaire. A summary of the data obtained from this administration of the questionnaire, along with data obtained from the permanent school records of students, is presented in Appendix C.

Although the schools were comparable in many respects, they differed in terms of academic productivity, as measured by the Florida State-Wide Twelfth Grade Test. The analyses presented in this chapter show significant differences between the attitudes of over-achievers and under-achievers, as well as, differences in the attitudes of groups of students between the more productive school (School A) and the less productive school (School B).

To facilitate the interpretation and treatment of data, numerical values were assigned to specific responses for each item on the questionnaire. As all items on the Student Attitude Scale were negative in nature, responses of Mostly True were indicative of negative attitudes while responses of Mostly False were indicative of positive attitudes. Therefore, by assigning a numerical value of one to all Mostly False responses, a numerical value of two to all Half True - Half False responses, and a numerical value of three to all Mostly True responses, the tendency toward more positive or toward more negative attitudes was reflected in attitude scores. Higher scores represented more positive attitudes and lower scores represented more negative attitudes.

The Student Attitude Scale was composed of five sections representing different dimensions of the attitudes of students. Items numbered 1 through 15 refer to the students' Acceptance of Self; items numbered 16 through 25 to the students' Attitude Toward Fellow Students; items numbered 26 through 45 to the students' Attitude Toward Teachers; items numbered 46 through 54 to the students' Attitude Toward the Principal; and items numbered 55 through 60 to the students' Attitude Toward School as a Whole. The ranges of possible attitude scores for the five sections of the Student Attitude Scale were as follows: (1) Acceptance of Self - from fifteen through forty-five points, (2) Attitude Toward Fellow Students - from ten through thirty points, (3) Attitude Toward Teachers - from twenty through sixty points, (4) Attitude Toward the Principal - from nine through twenty-seven points, and (5) Attitude Toward

School as a Whole - from six through eighteen points. In each case, higher scores represented more positive attitudes while lower scores represented more negative attitudes.

Questions regarding the educational levels of parents were designed so that the response categories ranged from less than a sixth-grade education through a master's degree or higher. To arrive at a numerical value for the educational attainment level of each parent a numerical value of one was assigned to the response category of less than a sixth grade education and a numerical value of seven was assigned to the response category of a master's degree or higher from college. The intervening response categories were assigned numerical values of two through six. The reader is referred to Appendix D for the specific text of questions concerning the educational attainment levels of parents. The parents' education score for each student was obtained by summing the numerical value assigned to the mother and the numerical value assigned to the father. The range of possible parents' education scores was from a low of two through a high of fourteen with lower scores representing lower levels of education and higher scores representing higher levels of education.

Attitude score intervals were selected so that, in so far as practical, they could be easily interpreted and were applicable to the scores of all groups of students. Although not precisely true, intervals were selected for each section of the Student Attitude Scale in such a manner that the distribution of scores was approximately equal between each of the score intervals for the combined sample populations of the two schools.

Parents' education score intervals were selected to insure that the scores of the majority of the students from each of the schools fell into the middle of three intervals. The lowest and highest intervals were selected so that the number of scores falling into each of these intervals was sufficiently large for chi square analysis to be meaningfully applied.

Comparisons of Attitudes Scores of Over-Achievers and Under-Achievers

The following analyses deal with differences between the attitudes of over-achievers and under-achievers. An over-achiever was defined as a student whose achievement score was one-half standard deviation or more above the mean state achievement score at the same aptitude score (within the range of aptitude scores of five through ninety-four). In like manner, under-achievers were those whose achievement scores were one-half standard deviation or more below the mean state achievement score.

In order to expand the data base, the sample populations of School A and School B were pooled. Therefore, when interpreting these analyses the reader is reminded that it was differences between the attitudes of over-achievers and under-achievers under consideration, not differences between schools.

Table 1 presents the chi square analysis of the distribution of the Acceptance of Self scores of over-achievers and under-achievers. As the reader can see, over-achievers had 64 scores in the 15 through 36 interval and 75 scores in the 37 through 45 interval. The scores of under-achievers were almost equally distributed between the two intervals with 42 scores falling in the lower interval and 43 in the higher interval. The calculated chi square of .241 fell below the chi square of 3.841 which was necessary for significance at the .05 level with 1 degree of freedom. Therefore, the difference between the distributions was not significant.

TABLE 1

ACCEPTANCE OF SELF

Score Intervals	Over-Achievers Observed Frequency	Under-Achievers Observed Frequency
15 - 36	64	42
37 - 45	75	43

Calculated X^2 value = .241

Critical value of X^2 at .05 level of significance = 3.841

Table 2 presents the chi square analysis of the distribution of the Attitude Toward Fellow Students scores of over-achievers and under-achievers. As can be seen from the data presented in Table 2, both over-achievers and under-achievers had more scores in the interval of 22 through 40 than in the interval of 10 through 21. Although over-achievers had a larger percentage of scores in the higher interval than under-achievers, the difference in magnitude was not enough to produce a significant chi square. The calculated chi square was .157. The value of a chi square which was statistically significant at the .05 level with 1 degree of freedom was 3.841.

TABLE 2

ATTITUDE TOWARD FELLOW STUDENTS

Score Intervals	Over-Achievers Observed Frequency	Under-Achievers Observed Frequency
10 - 21	60	39
22 - 40	79	46

Calculated X^2 value = .157

Critical value of X^2 at .05 level of significance = 3.841

Table 3 presents the chi square analysis of the distribution of the Attitude Toward Teachers scores of over-achievers and under-achievers. As the reader can see, more over-achievers had scores in the higher interval than in the lower interval while the opposite was true for under-achievers. This difference was highly significant as the calculated chi square was 10.429. The value of a chi square which was statistically significant at the .01

level with 1 degree of freedom was only 6.635. Over-achievers had significantly more positive Attitude Toward Teachers scores than under-achievers.

TABLE 3

ATTITUDE TOWARD TEACHERS

Score Intervals	Over-Achievers Observed Frequency	Under-Achievers Observed Frequency
20 - 46	51	50
47 - 60	88	35

Calculated X^2 value = 10.429

Critical value of X^2 at .01 level of significance = 6.635

Table 4 presents the chi square analysis of the distribution of the Attitude Toward the Principal scores of over-achievers and under-achievers. As can be seen from Table 4, both over-achievers and under-achievers had more scores in the interval of 20 through 27 than in the interval of 9 through 19. The difference in the distribution of the scores for the two groups was far from significant as the calculated chi square was only .003 with 3.841 being required for significance at the .05 level.

Table 5 presents the chi square analysis of the distribution of the Attitude Toward School as a Whole scores of over-achievers and under-achievers. Although over-achievers had more scores in the higher interval (74) than in the lower interval (65) and under-achievers had more scores in the lower interval (44) than in the higher interval (41), the distributions of scores were not significantly different.

TABLE 4

ATTITUDE TOWARD THE PRINCIPAL

Score Intervals	Over-Achievers Observed Frequency	Under-Achievers Observed Frequency
9 - 19	61	37
20 - 27	78	49

Calculated X^2 value = .003

Critical value of X^2 at the .05 level of significance = 3.841

TABLE 5

ATTITUDE TOWARD SCHOOL AS A WHOLE

Score Intervals	Over-Achievers Observed Frequency	Under-Achievers Observed Frequency
6 - 13	65	44
14 - 18	74	41

Calculated X^2 value = .529

Critical value of X^2 at .05 level of significance = 3.841

Interschool Comparisons of Attitude Scores

The reader is reminded that the two schools selected for this study differed in productivity as measured by an achievement test and served students comparable in educational plans and family background. The achievement scores were adjusted for aptitude and background data were supplied by the students, themselves.

The chi square analyses presented in the remainder of this chapter deal with differences between schools in the attitudes of specific groups of students. The five groups of students for which chi square analyses are presented were: (1) females, (2) males, (3) students with parents' education scores of two through seven, (4) students with parents' education scores of eight through ten, and students' with parents' education scores of eleven through fourteen.

Females

Table 6 presents the chi square analysis of the distribution of the Acceptance of Self scores of females in School A and School B. Females in School A had more scores in the interval of 37 through 45 than in the interval of 15 through 36, while females in School B had more scores in the 15 through 36 interval than in the 37 through 45 interval. However, the distributions were not significantly different at the .05 level, although the tendency toward significance was strong.

TABLE 6

ACCEPTANCE OF SELF
FEMALES

Score Intervals	School A Observed Frequency	School B Observed Frequency
15 - 36	54	46
37 - 45	60	30

Calculated X^2 value = 3.167

Critical value of X^2 at the .05 level of significance = 3.841

Table 7 presents the chi square analysis of the distribution of the Attitude Toward Fellow Students scores of females in School A and School B. As the reader can see from the data presented in Table 7, females in School A had slightly more scores in the 22 through 40 interval than in the 10 through 21 interval. Females in School B had more than twice as many scores in the 10 through 21 interval than in the 22 through 40 interval. Since the calculated chi square of 8.485 exceeded the value of a significant chi square at the .01 level with 1 degree of freedom, females in School A had significantly more positive Attitude Toward Fellow Students scores than females in School B.

Table 8 presents the chi square analysis of the distribution of the Attitude Toward Teachers scores of females in School A and School B. The scores of both groups was nearly equally distributed between the two intervals. This similarity of distributions was reflected in the calculated chi square of only .014.

TABLE 7

ATTITUDE TOWARD FELLOW STUDENTS
FEMALES

Score Intervals	School A Observed Frequency	School B Observed Frequency
10 - 21	52	51
22 - 40	62	25

Calculated X^2 value = 8.485

Critical value of X^2 at the .01 level of significance = 6.635

TABLE 8

ATTITUDE TOWARD TEACHERS
FEMALES

Score Intervals	School A Observed Frequency	School B Observed Frequency
20 - 46	58	38
47 - 60	56	38

Calculated X^2 value = .014

Critical value of X^2 at the .05 level of significance = 3.841

Table 9 presents the chi square analysis of the distribution of the Attitude Toward the Principal scores of females in School A and School B. More than two-thirds of the students in School A had scores in the higher interval while more than two-thirds of the students in School B had scores in the lower interval. The calculated chi square of 28.500 far exceeded that required for significance at the .001 level. Therefore, females in School A had significantly more positive Attitude Toward the Principal scores than females in School B.

TABLE 9

ATTITUDE TOWARD THE PRINCIPAL
FEMALES

Score Intervals	School A Observed Frequency	School B Observed Frequency
9 - 19	36	54
20 - 27	78	22

Calculated X^2 value = 28.500

Critical value of X^2 at the .001 level of significance = 10.827

Table 10 presents the chi square analysis of the distribution of the Attitude Toward School as a Whole scores of females in School A and School B. As the reader can see, most females in School A had scores in the higher interval while most females in

School B had scores in the lower interval. The calculated chi square of 14.866 exceeded the 10.827 required for significance at the .001 level. Therefore, females in School A had significantly more positive Attitude Toward School as a Whole scores than females in School B.

TABLE 10

ATTITUDE TOWARD SCHOOL AS A WHOLE FEMALES

Score Intervals	School A Observed Frequency	School B Observed Frequency
6 - 13	41	49
14 - 18	73	27

Calculated X^2 value = 14.866

Critical value of X^2 at the .001 level of significance = 10.827

Males

Table 11 presents the chi square analysis of the distribution of the Acceptance of Self scores of males in School A and School B. As the reader can see from the data presented in Table 11, both groups of males had more scores in the 37 through 45 interval than in the lower interval. The calculated chi square indicated there was not a significant difference in the distributions of scores for the two groups even though males in School B had a larger percentage of scores in the higher interval than males in School A.

TABLE 11

ACCEPTANCE OF SELF
MALES

Score Intervals	School A Observed Frequency	School B Observed Frequency
15 - 36	47	24
37 - 45	52	36

Calculated X^2 value = .843

Critical value of X^2 at the .05 level of significance = 3.841

Table 12 presents the chi square analysis of the distribution of the Attitude Toward Fellow Students scores of males in School A and School B. Both groups of males had more scores in the 22 through 40 interval than in the 10 through 21 interval. The calculated chi square of .091 was below the 3.841 necessary for a significant difference at the .05 level. Therefore, there was no significant difference between the distributions.

Table 13 presents the chi square analysis of the distribution of the Attitude Toward Teachers scores of males in School A and School B. While the majority of males in School A had scores in the 20 through 46 interval, the majority of males in School B had scores in the 47 through 60 interval. Although the calculated chi square of

3.631 was below the 3.841 necessary for significance at the .05 level, the tendency toward significance was strong.

TABLE 12

ATTITUDE TOWARD FELLOW STUDENTS MALES

Score Intervals	School A Observed Frequency	School B Observed Frequency
10 - 21	42	24
22 - 40	57	36

Calculated X^2 value = .091

Critical value of X^2 at the .05 level of significance = 3.841

TABLE 13

ATTITUDE TOWARD TEACHERS MALES

Score Intervals	School A Observed Frequency	School B Observed Frequency
20 - 46	50	21
47 - 60	49	39

Calculated X^2 value = 3.631

Critical value of X^2 at the .05 level of significance = 3.841

Table 14 presents the chi square analysis of the distribution of the Attitude Toward the Principal scores of males in School A and School B. The majority of males in School A had scores in the 20 through 27 interval while the majority of males in School B had scores in the 9 through 19 interval. Although the calculated chi square of 3.672 fell below the 3.841 required for significance at the .05 level, there was a strong tendency toward significance for males in School A to have more positive Attitude Toward the Principal scores than males in School B.

TABLE 14

ATTITUDE TOWARD THE PRINCIPAL
MALES

Score Intervals	School A Observed Frequency	School B Observed Frequency
9 - 19	39	33
20 - 27	60	27

Calculated X^2 value = 3.672

Critical value of X^2 at the .05 level of significance = 3.841

Table 15 presents the chi square analysis of the distribution of the Attitude Toward School as a Whole scores of males in School A and School B. Although both groups of students had more scores in the lower interval than in the higher interval, males in School A had a larger percentage of scores in the higher interval than males in School B. However, the calculated chi square did not indicate the difference was significant.

TABLE 15

ATTITUDE TOWARD SCHOOL AS A WHOLE
MALES

Score Intervals	School A Observed Frequency	School B Observed Frequency
6 - 13	51	36
14 - 18	48	24

Calculated X^2 value = 1.086

Critical value of X^2 at the .05 level of significance = 3.841

Students with Parents' Education Scores of Two through Seven

Table 16 presents the chi square analysis of the distribution of the Acceptance of Self scores of students with parents' education scores of 2 through 7 in School A and School B. As the reader can see, both groups of students had more scores in the lower interval than in the higher interval. Since the calculated chi square of .060 was far below that required for significance at the .05 level, there was no significant difference between the two distributions of scores.

Table 17 presents the chi square analysis of the distribution of the Attitude Toward Fellow Students scores of students with parents' education scores of 2 through 7 in School A and School B. While students in School A had more scores in the higher interval than in the lower interval and students in School B had more scores in the lower interval than in the higher interval, the magnitude of the difference did not produce a significant chi square at the .05 level.

TABLE 16

ACCEPTANCE OF SELF
PARENTS' EDUCATION 2 - 7

Score Intervals	School A Observed Frequency	School B Observed Frequency
15 - 36	23	16
37 - 45	21	13

Calculated X^2 value = 0.60

Critical value of X^2 at the .05 level of significance = 3.841

TABLE 17

ATTITUDE TOWARD FELLOW STUDENTS
PARENTS' EDUCATION 2 - 7

Score Intervals	School A Observed Frequency	School B Observed Frequency
10 - 21	18	15
22 - 30	26	14

Calculated X^2 value = .825

Critical value of X^2 at the .05 level of significance = 3.841

Table 18 presents the chi square analysis of the distribution of the Attitude Toward Teachers scores of students with parents' education scores of 2 through 7 in School A and School B. The distribution of scores presented in Table 18 shows that the majority of the students in both schools had more scores in the 20 through 46 interval than in the 47 through 60 interval. Although the students in School A had a higher percentage of scores in the lower interval than students in School B the difference was not enough to produce a significant chi square at the .05 level.

TABLE 18

ATTITUDE TOWARD TEACHERS
PARENTS' EDUCATION 2 - 7

Score Intervals	School A Observed Frequency	School B Observed Frequency
20 - 46	29	16
47 - 60	15	13

Calculated X^2 value = .855

Critical value of X^2 at the .05 level of significance = 3.841

Table 19 presents the chi square analysis of the distribution of the Attitude Toward the Principal scores of students with parents' education scores of 2 through 7 in School A and School B. Most students in School A had scores in the higher interval and the majority of students in School B had scores in the lower interval. This difference was reflected in the calculated chi square of 4.277 which exceeded the 3.841 required for significance at the .05 level. Students with parents' education scores of 2 through 7 in School A had significantly more positive Attitude Toward the Principal scores than students in School B.

TABLE 19

ATTITUDE TOWARD THE PRINCIPAL
PARENTS' EDUCATION 2 - 7

Score Intervals	School A Observed Frequency	School B Observed Frequency
9 - 19	15	17
20 - 27	29	12

Calculated X^2 value = 4.277

Critical value of X^2 at the .05 level of significance = 3.841

Table 20 presents the chi square analysis of the distribution of the Attitude Toward School as a Whole scores of students with parents' education scores of 2 through 7 in School A and School B. Although students in School A had more scores in the higher interval than in the lower interval while students in School B had more scores in the lower interval than in the higher interval, the calculated chi square did not indicate the difference was significant.

TABLE 20

ATTITUDE TOWARD SCHOOL AS A WHOLE
PARENTS' EDUCATION 2 - 7

Score Intervals	School A Observed Frequency	School B Observed Frequency
6 - 13	19	17
14 - 18	25	12

Calculated X^2 value = 1.669

Critical value of X^2 at the .05 level of significance = 3.841

Students with Parents' Education Scores of Eight through Ten

Table 21 presents the chi square analysis of the distribution of the Acceptance of Self scores of students with parents' education scores of 8 through 10 in School A and School B. Although students in School A had more scores in the higher interval than in the lower interval and those in School B had more scores in the lower interval than in the higher interval, the magnitude of the difference in distribution produced a calculated chi square of only .268. Since a chi square of 3.841 was required for significance at the .05 level, the observed difference in the distributions was not significant.

Table 22 presents the chi square analysis of the distribution of the Attitude Toward Fellow Students scores of students with parents' education scores of 8 through 10 in School A and School B.

Although students in School A had a longer percentage of scores in the higher interval whereas students in School B had a larger percentage of scores in the lower interval, the difference between the two distributions was not significant at the .05 level.

TABLE 21

ACCEPTANCE OF SELF
PARENTS' EDUCATION 8 - 10

Score Intervals	School A Observed Frequency	School B Observed Frequency
15 - 36	70	40
37 - 45	71	35

Calculated X^2 value = .268

Critical value of X^2 at the .05 level of significance = 3.841

TABLE 22

ATTITUDE TOWARD FELLOW STUDENTS
PARENTS' EDUCATION 8 - 10

Score Intervals	School A Observed Frequency	School B Observed Frequency
10 - 21	62	40
22 - 30	79	35

Calculated X^2 value = 1.719

Critical value of X^2 at the .05 level of significance = 3.841

Table 23 presents the chi square analysis of the distribution of the Attitude Toward Teachers scores of students with parents' education scores of 8 through 10 in School A and School B. While a slight majority of students in School A had scores in the 20 through 46 interval, the vast majority of students in School B had scores in the 47 through 60 interval. The calculated chi square of 4.870 substantiated that the distributions of scores were significantly different beyond the .05 level. Students in School B with parents' education scores of 8 through 10 had significantly more positive Attitude Toward Teachers scores than students in School A.

TABLE 23

ATTITUDE TOWARD TEACHERS
PARENTS' EDUCATION 8 - 10

Score Intervals	School A Observed Frequency	School B Observed Frequency
20 - 46	71	26
47 - 60	70	49

Calculated X^2 value = 4.870

Critical value of X^2 at the .05 level of significance = 3.841

Table 24 presents the chi square analysis of the distribution of the Attitude Toward the Principal scores of students with parents' education scores of 8 through 10 in School A and School B. As the reader can see, the majority of students in School A had scores in the 20 through 27 interval while the majority of students in School B had scores in the 9 through 19 interval. The calculated chi square of 10.990 exceeded the 10.827 required for significance at the .001 level. Therefore, students in School A with parents' education scores of 8 through 10 had significantly more positive Attitude Toward the Principal scores than students in School B.

TABLE 24

ATTITUDE TOWARD THE PRINCIPAL PARENTS' EDUCATION 8 - 10

Score Intervals	School A Observed Frequency	School B Observed Frequency
9 - 19	55	47
20 - 27	86	28

Calculated X^2 value = 10.990

Critical value of X^2 at the .001 level of significance = 10.827

Table 25 presents the chi square analysis of the distribution of the Attitude Toward School as a Whole scores of students with parents' education scores of 8 through 10 in School A and School B. As the reader can see, the majority of students in School A had scores in the higher interval while the majority of students in School B had scores in the lower interval. The calculated chi square of 6.344 indicated this difference was significant beyond the .02 level. Therefore, students in School A with parents' education scores of 8 through 10 had significantly more positive Attitude Toward School as a Whole scores than students in School B.

TABLE 25

ATTITUDE TOWARD SCHOOL AS A WHOLE
PARENTS' EDUCATION 8 - 10

Score Intervals	School A Observed Frequency	School B Observed Frequency
6 - 13	63	47
14 - 18	78	28

Calculated X^2 value = 6.344

Critical value of X^2 at the .02 level of significance = 5.412

Students with Parents' Education Scores of Eleven through Fourteen

Table 26 presents the chi square analysis of the distribution of the Acceptance of Self scores of students with parents' education scores of 11 through 14 in School A and School B. Although both groups of students had more scores in the higher interval than in the lower interval, the students in School A recorded more than twice as many scores in the interval of 37 through 45 than in the interval of 15 through 36 whereas students in School B had less than 40 percent more scores in the higher interval than in the lower interval.

However, this difference in the distributions was not enough to produce a calculated chi square significant at the .05 level.

TABLE 26

ACCEPTANCE OF SELF
PARENTS' EDUCATION 11 - 14

Score Intervals	School A Observed Frequency	School B Observed Frequency
15 - 36	8	14
37 - 45	20	18

Calculated X^2 value = 1.490

Critical value of X^2 at the .05 level of significance = 3.841

Table 27 presents the chi square analysis of the distribution of the Attitude Toward Fellow Students scores of students with parents' education scores of 11 through 14 in School A and School B. Although the scores of students in School A were equally distributed between the two intervals and students in School B had more scores in the lower interval than in the higher interval, the calculated chi square of .954 was below the 3.841 necessary for significance at the .05 level. Therefore, there was no significant difference between the distribution of scores.

Table 28 presents the chi square analysis of the distribution of the Attitude Toward Teachers scores of students with parents' education scores of 11 through 14 in School A and School B. As the reader can see, the majority of students in School B had scores in the 20 through 46 interval while the majority of students in School A had scores in the 47 through 60 interval. Although the calculated chi square was not significant at the .05 level, the tendency toward significance was strong.

TABLE 27

ATTITUDE TOWARD FELLOW STUDENTS
PARENTS' EDUCATION 11 - 14

Score Intervals	School A Observed Frequency	School B Observed Frequency
10 - 21	14	20
22 - 40	14	12

Calculated X^2 value = .954

Critical value of X^2 at the .05 level of significance = 3.841

TABLE 28

ATTITUDE TOWARD TEACHERS
PARENTS' EDUCATION 11 - 14

Score Intervals	School A Observed Frequency	School B Observed Frequency
20 - 46	8	17
47 - 60	20	15

Calculated X^2 value = 3.711

Critical value of X^2 at the .05 level of significance = 3.841

Table 29 presents the chi square analysis of the distribution of the Attitude Toward the Principal scores of students with parents' education scores of 11 through 14 in School A and School B. As the reader can see, the majority of students in School A had scores in the higher interval and most students in School B had scores in the lower interval. Since the calculated chi square of 17.522 far exceeded the 10.827 required for significance at the .001 level, students in School A with parents' education scores of 11 through 14 had significantly more positive Attitude Toward the Principal scores than students in School B.

TABLE 29

ATTITUDE TOWARD THE PRINCIPAL
PARENTS' EDUCATION 11 - 14

Score Intervals	School A Observed Frequency	School B Observed Frequency
9 - 19	5	23
20 - 27	23	9

Calculated X^2 value = 17.522

Critical value of X^2 at the .001 level of significance = 10.827

Table 30 presents the chi square analysis of the distribution of the Attitude Toward School as a Whole scores of students with parents' education scores of 11 through 14 in School A and School B.

Most of the students in School A had scores in the 14 through 18 interval, whereas the majority of students in School B had scores in the 6 through 13 interval. The calculated chi square of 5.358 exceeded the 3.841 required for significance at the .05 level. Therefore, students with parents' education scores of 11 through 14 in School A had significantly more positive Attitude Toward School as a Whole scores than students in School B.

TABLE 30

ATTITUDE TOWARD SCHOOL AS A WHOLE
PARENTS' EDUCATION 11 - 14

Score Intervals	School A Observed Frequency	School B Observed Frequency
6 - 13	10	21
14 - 18	18	11

Calculated X^2 value = 5.358

Critical value of X^2 at the .05 level of significance = 3.841

Summary

The only significant difference in the attitude scores of over-achievers and under-achievers was observed in the Attitude Toward Teachers scores. Over-achievers had significantly more positive Attitude Toward Teachers scores than under-achievers.

Several significant differences were observed between schools in the attitude scores of female students. Female students in School A had significantly more positive Attitude Toward Fellow Students, Attitude Toward the Principal, and Attitude Toward the School as a Whole scores than female students in School B. Although not statistically significant, female students in School A also tended to have more positive Acceptance of Self scores than female students in School B.

No statistically significant differences were observed between schools in the attitude scores of male students. However, male students in School B tended to have more positive Attitude Toward Teachers scores than male students in School A. Although not statistically significant, male students in School A also tended to have more positive Attitude Toward the Principal scores than male students in School B.

Only one statistically significant difference was observed between schools in the attitude scores of students with parents' education scores of two through seven. Students in School A with parents' education scores of two through seven had more positive Attitude Toward the Principal scores than students in School B with comparable parents' education scores.

Three statistically significant differences were observed between schools in the attitude scores of students with parents' education scores of eight through ten. Students in School A with parents' education scores of eight through ten had significantly more positive Attitude Toward the Principal and Attitude Toward the

School as a Whole scores than students in School B with comparable parents' education scores. Students in School B with parents' education scores of eight through ten had significantly more positive Attitude Toward Teachers scores than students in School A with comparable parents' education scores.

Students in School A with parents' education scores of eleven through fourteen had significantly more positive Attitude Toward the Principal and Attitude Toward School as a Whole scores than students in School B with comparable parents' education scores. Although not statistically significant, students in School A with parents' education scores of eleven through fourteen also tended to have more positive Attitude Toward Teachers scores than students in School B with comparable parents' education scores.

CHAPTER IV

ANALYSIS OF INTERVIEW DATA

The purpose of this chapter is to present and discuss the analysis of data obtained in interviews with twenty-eight students in the more productive school (School A) and twenty-four students in the less productive school (School B). Since this study was exploratory, the additional data provided by interviews should enhance the possibility of relationships being revealed which could form the basis for future studies. In addition, the writer hoped to provide information which, in conjunction with the findings of the study of the adult social systems of the same schools conducted by Adkinson, could form a more comprehensive basis for an analysis of relationships within the two school environments.[1] Finally, interview data were gathered to provide information which may reveal some possible reasons for differences in the attitudes of students. A copy of the interview guide along with a summary of the responses given by students is attached in Appendix F.

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[1] William Dane Adkinson, "An Exploratory Study of the Adult Social Systems of Two Florida Public Secondary School Selected on the Basis of a Difference in Productivity," (Ed. D. dissertation, University of Florida, 1974).

Four groups of students from each school were selected for interviews: (1) female students with parents' education scores of two through seven, (2) male students with parents' education scores of two through seven, (3) female students with parents' education scores of eleven through fourteen, and (4) male students with parents' education scores of eleven through fourteen.

Individual students were selected for interviews on a systematic basis. First, those students with the most extreme scores of their group on the Attitude Toward Teachers and Attitude Toward the Principal sections of the Student Attitude Scale were eliminated from consideration. Second, students were listed in order of numerical distance from the median total score of their group on the Student Attitude Scale. Third, those students who were available at the time the writer was scheduled for interviews were selected, with students having total scores closest to the median total score of their group given the highest priority for interviews. The writer assumed this selection process would result in the identification of students whose attitudes and perceptions more accurately represented those of their group than students selected by taking a random sample. The identification numbers of students interviewed are given in Appendix F, along with the summary of interview data.

The analyses which follow are in the form of selective content analysis with emphasis on the subjective interpretation of specific words and phrases used by students during the interview sessions. It was the intent of the writer to base interpretations solely on the data presented by students in interviews and included in Appendix F. However, no attempt was made to ignore the information presented by students on the Student Attitude Scale or information obtained during visits to the two schools.

Thirteen questions were asked of students during each interview session. The first eight dealt with the school activities of the most popular students in each school and the relative instrumentality of these activities for popularity with students. The next two questions sought descriptions of the most popular and unpopular teachers to determine commonalities and differences between schools in the characteristics and behaviors of these teachers. The final three questions were designed to elicit open ended responses to indicate possible reasons for differences between schools in the attitudes of students toward the principal and toward the school as a whole. Using these questions as a basis of organization, the sections which follow present the data gathered in interviews with selected students in the two schools.

Popular Boys

Clubs

In response to the question: "What clubs do the most popular boys belong to?", students in School A named nine clubs having the most popular boys as members with four clubs being named by all four groups of students. The clubs named by all four groups of students interviewed in School A were: Senior Class Officers, Student Council, Omega, and Key Club. Responding to the same question, students in School B named seven clubs having the most popular boys as members. The clubs named by all four groups of students in School B were Hi Y and "E" Clubs. Thus there was greater dispersion of the responses of students interviewed in School A than in School B as to which clubs the most popular boys belonged to. Since four clubs were named by all four groups of students interviewed in School A and only two clubs were named by all four groups in School B, this difference could mean that the most popular boys in School A were perceived as participating in more clubs than the most popular boys in School B.

Sports

The following question was asked of all students interviewed in School A and School B: "What sports do the most popular boys participate in?" Students interviewed in School A named six sports as having the most popular boys as participants with three sports being named by all four groups of students. In response to the same question students interviewed in School B named four sports having the most popular boys as participants with only two sports being named by all four groups of students. Thus the data presented above may be interpreted as meaning that the most popular boys in School A were perceived as participating in more interscholastic sports than the most popular boys in School B.

Scholarship

Students who were interviewed in the two schools were asked the following question: "What kind of scholars are the most popular boys?" All four groups of students in School B responded that the most popular boys were "average" scholars while two groups in School A responded that the most popular boys were "above average" scholars and the other two groups said they were "good" or "B - C" scholars. From the foregoing analysis it appears that the most popular boys were perceived by the students interviewed in School A as being above average scholars while the most popular boys were perceived by the students interviewed in School B as only average scholars.

Priority of Activities

The selected students in both schools were asked to respond to the following: "If a boy wanted to be the most popular boy in this school, where should he direct his efforts? Rank club membership, sports, and scholarship in order of priority." Based upon modal responses of the students who were interviewed, if a boy wanted to be the most popular boy in either school sports would be of the highest priority, clubs second, and scholarship would have the lowest priority. However, nearly one-fourth of the students responding in School A named sports as having less than the highest priority, whereas only one student in School B named sports as having less than the highest priority. The data presented above may be interpreted as meaning that participation in sports was perceived by the students interviewed as being more instrumental to popularity for boys in School B than in School A.

Popular Girls

Clubs

Students in both schools were asked to respond to the following question: "What clubs do the most popular girls belong to?" Students who were interviewed in both School A and School B named eight clubs as having the most popular girls as members with three clubs being named by three or more groups of students in each school. Thus this could be interpreted as meaning there was little difference in the distribution of the most popular girls' participation among clubs between schools as perceived by the students interviewed.

Sports and Sports-Related Activities

The selected students in both schools were asked to respond to the following question: "What sports or sports-related activities do the most popular girls participate in?" Students in School A named eight sports activities as having the most popular girls as participants with four activities being named by three or more groups, whereas students in School B named six sports activities having the most popular girls as participants with only one activity being named by three or more groups. The activities named by three or more groups in School A were: Majorettes, Cheerleading, Basketball, and Track, while the one being named by three or more groups in School B was Cheerleading. The analysis above may be interpreted as indicating the most popular girls in School A as participating in more sports and sports-related activities than the most popular girls in School B.

Scholarship

The following question was asked of the selected students in both schools: "What kind of scholars are the most popular girls?" The responses given by the four groups of students in School A were: "average," "above average," "good," and "C." Students in School B responded that the most popular girls in their school were: "average," "good," "pretty smart," and "pretty good." These data could indicate that the students who were interviewed in School B were more likely to perceive their most popular girls as being above average scholars than the students interviewed in School A.

Priority of Activities

Students in School A and School B were asked to respond to the following: "If a girl wanted to be the most popular girl in this school, where should she direct her efforts? Rank club membership, sports, and scholarship in order of priority." Modal responses of the students interviewed in both School A and School B indicated that these students believed that if a girl wanted to be the most popular girl in either school she should direct her efforts first toward sports and sports-related activities, second to clubs, and third to scholarship. However, seventeen of the twenty-eight students responding in School A gave sports less than the highest priority while no students in School B gave sports less than the highest priority. Twelve students in School A gave scholarship higher than the lowest priority while only three students in School B gave scholarship higher than the lowest priority. These expressed opinions might indicate that: (1) participation in sports and sports-related activities was perceived by the interviewed students as being less instrumental to popularity for girls in School A than in School B, and (2) good scholarship was perceived as being more instrumental to popularity for girls in School A than in School B.

Teachers

Popular Teachers

In order to gather data concerning the characteristics and behaviors of the most popular teachers, as perceived by students, those students selected for interviews were asked to respond to the following question: "How would you describe the most popular teachers in this school?" Because the responses given by students varied greatly, words and phrases were placed into groups seen as appropriately belonging together by the writer. The first group consisted of: "concerned about," "accept," "talk to," "listen," "understand," "accessible," and "care." Words from this group were used ten times by students in School A and eleven times by students in School B to describe the most popular teachers in their school.

The second group of words and phrases consisted of those terms descriptive of teachers' personalities such as: "relaxed," "friendly," "patient," "good humor," "honest," "open minded," "receptive," "easy to get along with," and "outgoing." Words and phrases similar to the terms in this second group were used ten times by students in School A and eleven times by students in School B in their descriptions of the most popular teachers.

The third group of words used by students to describe the most popular teachers consisted of only two words: "help" and "helpers." These two words were selected to form a single group because they were used more often than any other words or phrases to describe the most popular teachers in both schools. Students in School A and School B both used "help" or "helper" five times in their descriptions of the most popular teachers.

The fourth group of words used by students to describe the most popular teachers also consisted of only two words: "young" and "younger." Students in School A used these words five times and students in School B used these words four times to describe their most popular teachers.

The analyses presented above might indicate the most popular teachers in both schools were likely to be perceived by the selected students as young teachers who were relaxed, friendly, patient, honest, open minded, outgoing, concerned about students, and helpful.

The fifth group of words and phrases were those specifically indicative of the learning environments within the classrooms such as "explain," "require a certain amount of work," "have different ways of teaching," "organized," "get student participation," and "challenging." Students in School A used words and phrases similar to the ones listed eight times in describing the most popular teachers and students in School B used them twelve times. This analysis could indicate that the students interviewed in both schools perceived the most popular teachers as those who: were organized, required students to work in class, had student participation in their classes, and used a variety of teaching methods.

In addition to the analyses presented above, key words and phrases were selected which were used to describe the most popular teachers in one of the schools, but not in both. By doing this the writer hoped to identify student-perceived characteristics of the most popular teachers which were unique to each of the two schools. Students interviewed in School A used the words "active" or "involved" seven times in their descriptions of the most popular teachers, whereas no students in School B used either of these words to describe their most popular teachers. The following phrases were used by students in School B to describe their most popular teachers: "bend the rules a little," "give you the benefit of doubt when you need it," and "give you breaks." No students interviewed in School A used these or similar phrases to describe their most popular teachers. Data presented in these analyses could indicate that: (1) the selected students in School A were likely to perceive the most popular teachers as being involved and active, and (2) the selected students in School B were likely to perceive the most popular teachers as ones who were willing to bend the rules and give students a break.

Unpopular Teachers

To gather data concerning the student perceived characteristics and behaviors of the most unpopular teachers in the two schools, students were asked the following question: "How would you describe the most unpopular teachers in this school?" Because the responses of the students interviewed varied greatly, words and phrases were placed into groups seen as appropriately belonging together by the writer. The first group consisted of: "act like they don't want to help," "don't see the students' point of view," "not eager to listen," and "don't try to understand." Students in School A used these or similar phrases six times in their description of the most unpopular teachers and students in School B used them four times in their descriptions of the most unpopular teachers.

The second group of words and phrases consisted of those descriptive of the personalities of teachers, such as: "closed minds," "emotional," "moody," "demand respect," and "snobbish." Students in School A used words and phrases similar to the ones listed fifteen times and students in School B used them nine times to describe the most unpopular teachers.

The analyses presented above could be interpreted as meaning there were certain characteristics held in common by the most unpopular teachers in both schools, as perceived by the selected students. The most unpopular teachers in both schools were likely to be those perceived by the students, who were interviewed, as not wanting to help or listen to students, being emotional, not having an open mind, and thinking they were superior to students.

The last group of words and phrases were chosen because they were specifically descriptive of the learning environments within the classrooms. This group was composed of words and phrases similar to the following: "we are always wrong," "play favorites," "push us to the limit," "unorganized," "they do all the talking in class," "no alternative methods for students," "give busy work," and "don't challenge students." The students who were interviewed in School A used words and phrases similar to these sixteen times in their descriptions of the most unpopular teachers and students in School B used them seventeen times to describe the most unpopular teachers in their school. The data presented in this analysis could be interpreted as meaning the most unpopular teachers in both schools were likely to be perceived by the selected students as those who: were unorganized, were too easy or too hard, played favorites among the students, and used teaching methods that were inappropriate or inflexible.

Principal

To gather data concerning the students' perceptions of the principal, the students selected for interviews were asked to respond to the following: "Who do you think likes the principal the best, boys or girls? Why?" Nineteen of the twenty-five students responding in School A named their own sex as liking the principal best while only twelve of the twenty-three students responding in School B named their own sex as liking the principal best. In their responses as to why they named boys or girls as liking the principal best, the students interviewed in School A described the principal as : "friendly" to girls, a "fatherly image" to girls, helping and talking to boys, a "big brother" to boys, as a "symbol of authority," "liberal," having a "good sense of humor," and giving students "a break." Students who were interviewed in School B described the principal as: having "no contact with students," taking more interest in boys' sports, listening to more girls than boys, "friendly" to boys, and helping boys out when they needed it.

Students who were interviewed in both schools were also asked to respond to a second question: "If you could make a suggestion or send a message to the principal without him knowing where it came from, what would you tell him?" In response, three groups of students in School B suggested they would like to "know" the principal better or would like for the principal to "know" the students better. No students interviewed in School A expressed a desire to know the principal better or for the principal to know the students better. Two groups of students in School A suggested they would like for the principal to "find out what the teachers are doing" or to "make sure that the teachers read the announcements." No students interviewed in School B expressed a desire for the principal to find out anything about teachers or to make them do anything. However, one student in School B did indicate "you can miss three weeks of classes and catch up in one week" as a message he would like to send to the principal.

From the responses given one could summarize that: (1) the principal in School A was perceived as having personal contact with more students than the principal in School B, (2) the principal in

School A was perceived more favorably by both the boys and the girls interviewed than the principal in School B, and (3) the selected students in School A were more likely to perceive the principal as the administrative leader of the school than the students interviewed in School B.

School

In an effort to obtain more information concerning the attitudes of students toward the school the students selected for interviews in both schools were asked to respond to the following question: "What should the school do to help students get to know each other better?" All groups of students in School A and three of the four groups of students in School B replied that the school was doing about all it could, had done a good job or that it was not the school's responsibility to help students get to know each other better. Three of the groups interviewed in School B stated that the students did not "associate with each other," did not have any "school spirit," or that the students did not care. The data presented above may be interpreted as meaning the students selected for interviews from both schools perceived the schools as having similar roles.

The primary difference between schools, observed in the data presented above, was in terms of cohesiveness of the student body. These data could be interpreted as meaning the students interviewed in School B were likely to place more responsibility or blame on students for a lack of school cohesiveness than the students interviewed in School A.

Summary

The reader is reminded that the analyses presented in this chapter were in the form of selective content analysis with emphasis on the subjective interpretation of specific words and phrases used by students during interview sessions.

The responses given by the selected students during interview sessions and presented in the analyses of this chapter give reason to suspect the following:

1. The most popular boys in School A were perceived as participating in more clubs than the most popular boys in School B.

2. The most popular boys in School A were perceived as participating in more interscholastic sports than the most popular boys in School B.

3. The most popular boys in School A were perceived as being above average scholars while the most popular boys in School B were perceived as being only average scholars.

4. Participation in sports was perceived as being more instrumental to popularity for boys in School B than in School A.

5. There was little difference between schools in the distribution of the most popular girls' participation among clubs.

6. The most popular girls in School A were perceived as participating in more sports and sports-related activities in School A than in School B.

7. The most popular girls in School B were perceived as being above average scholars than the most popular girls in School A.

8. Participation in sports and sports-related activities was perceived as being more instrumental to popularity for girls in School B than for girls in School A.

9. Good scholarship was perceived as being more instrumental to popularity for girls in School A than for girls in School B.

10. The most popular teachers in both schools were perceived as young teachers who were relaxed, friendly, patient, honest, open minded, outgoing, concerned about students, and helpful.

11. The most popular teachers in both schools were also perceived as those who: were organized, required students to work in class, had student participation in their classes, and used a variety of teaching methods.

12. The most popular teachers were more likely to be perceived as active and involved by the students in School A than by the students in School B.

13. The most popular teachers in School B were more likely to be perceived as ones who were willing to bend the rules and give students a break than the most popular teachers in School A.

14. The most unpopular teachers in both schools were perceived as not wanting to help or listen to students, being emotional, not having an open mind, and thinking they were superior to students.

15. The most unpopular teachers in both schools were also perceived as those who: played favorites among the students, were unorganized, were too easy or too hard, and used teaching methods that were inappropriate or inflexible.

16. The principal in School A was perceived as having personal contact with more students than the principal in School B.

17. The principal in School A was perceived more favorably by both boys and girls than the principal in School B.

18. The principal of School A was more likely to be perceived as the administrative leader of the school than the principal of School B.

19. The role of the school was perceived in a similar manner by students in both schools.

20. Students in School B were more likely to place responsibility or blame on students for a lack of school cohesiveness than students in School A.

CHAPTER V

SUMMARY AND DISCUSSION

Summary

The study reported herein was one of two companion studies completed in the same schools. The other study involved an analysis of the adult social systems of the schools and was conducted by William Dane Adkinson.[1]

The primary problem of this study was to determine differences between the attitudes of students in two, large, urban, secondary schools differing in academic productivity. In addition, possible differences between the attitudes of over-achieving and under-achieving students in the combined populations of the two schools were investigated.

The target populations were limited to those white students who completed the state-wide senior achievement test in the 1973-1974 school year and had been enrolled in the same school for three consecutive years. The sample population in the more productive school was composed of 213 students and in the less productive school the sample population was 136 students.

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[1] William Dane Adkinson, "An Exploratory Study of the Adult Social Systems of Two Florida Public Secondary Schools Selected on the Basis of a Difference in Productivity," (Ed. D. dissertation, University of Florida, 1974).

The attitudes of students were measured through the administration of the Student Attitude Scale. This scale was designed to provide measures of five different dimensions of student attitudes. These were: (1) Acceptance of Self, (2) Attitude Toward Fellow Students, (3) Attitude Toward Teachers, (4) Attitude Toward the Principal, and (5) Attitude Toward School as a Whole.

Chi square analyses were performed to test differences in the attitudes of students using .05 as the minimal acceptable level of significance. Auxiliary data obtained from interviews with students were subjected to selective content analysis with emphasis on the subjective interpretation of specific words and phrases used by students in their responses to the questions posed by the writer.

The analysis of the Student Attitude Scale data supported the following findings of differences in the attitudes of students, with respect to the samples investigated.

1. Over-achieving students had significantly more positive attitudes toward teachers than under-achieving students. The chi square analysis presented in Table 3 of Chapter III supported this finding beyond the .01 level of significance.

2. Female students in the more productive school had significantly more positive attitudes toward fellow students than female students in the less productive school. Chi square analysis

supported this finding beyond the .01 level of significance. (See Table 7, Chapter III.)

3. Female students in the more productive school had significantly more positive attitudes toward the principal than female students in the less productive school. This finding was supported by the chi square analysis presented in Table 9 of Chapter III beyond the .001 level of significance.

4. Female students in the more productive school had significantly more positive attitudes toward school as a whole than female students in the less productive school. This finding was supported by the chi square analysis presented in Table 10 of Chapter III beyond the .001 level of significance.

5. Students in the less productive school whose parents had at least a high school education, but less than a four year degree from college had significantly more positive attitudes toward teachers than students in the more productive school whose parents had comparable levels of education. The analysis presented in Table 23 of Chapter III supported this finding beyond the .05 level of significance. (To make comparisons between the attitudes of students in the more productive school and the less productive school at comparable levels of parents' education, three levels of parents' education were identified. The lowest level was for those students whose parents averaged less than a high school education. The middle level was for those students whose parents averaged at least a high school

education, but less than a four year degree from college. The highest level was for those students whose parents averaged more than a business or trade school education with at least one parent having a four year degree or higher from college.)

6. Students in the more productive school had significantly more positive attitudes toward the principal than students in the less productive school at all three levels of parents' education. Tables 19, 24, and 29 of Chapter III supported these findings beyond the .05 level of significance for the lowest educational category and beyond the .001 level of significance for the middle and highest educational categories.

7. Students in the more productive school whose parents were in the middle and highest educational categories had significantly more positive attitudes toward school as a whole than students in the less productive school whose parents had comparable levels of education. These differences were supported by the analyses presented in Tables 25 and 30 of Chapter III beyond the .02 and .05 levels of significance, respectively.

Although no statistical analyses were performed and the method of selecting students did not warrant generalizations beyond the students interviewed, the interview data led to the following summary of major differences between schools for the students interviewed.

1. The most popular male students in the more productive school were perceived as participating in more clubs than the most popular male students in the less productive school.

2. The most popular male students in the more productive school were perceived as participating in more interscholastic sports than the most popular male students in the less productive school.

3. Participation in sports was perceived as being more instrumental to popularity for male students in the less productive school than for male students in the more productive school.

4. The most popular female students in the more productive school were perceived as participating in more sports and sports-related activities than the most popular female students in the less productive school.

5. Participation in sports and sports-related activities was perceived as being more instrumental to popularity for female students in the less productive school than for female students in the more productive school.

6. Good scholarship was perceived as being more instrumental to popularity for female students in the more productive school than for female students in the less productive school.

7. The most popular teachers in the more productive school were perceived as being active and involved.

8. The most popular teachers in the less productive school were perceived as willing to bend the rules and give students a break.

9. The principal in the more productive school was perceived

as having personal contact with more students than the principal in the less productive school.

10. The principal in the more productive school was perceived more favorably by both male and female students than the principal in the less productive school.

Discussion

Since the two schools selected for this study were closely matched on the socio-economic status of parents (as indicated by income, education, and occupation) it was not feasible to use this factor to explain the difference in the academic productivity of the two schools. Neither did it appear feasible to use the plans of students for future education, racial composition of the schools, or scholastic aptitude as factors to explain the difference in academic productivity. The schools were matched on the basis of the plans of students for future education and percentage of the student enrollments classified as nonwhite. Scholastic aptitude was statistically controlled. The size and urbanness of the schools, as well as, the base of public tax support were also controlled by the selection process.

If socio-economic status of parents, students' plans for future education, racial composition of the schools, scholastic aptitude, size of the school, urbanness of the school, or base of public tax support do not seem to explain the difference in academic productivity of the two schools, than on what basis can the difference be explained? Although generalizations based on interview and questionnaire data were not warranted beyond the samples of students, possible explanations for the difference in the academic productivity of the two schools can be derived from these data.

Were the student human-relations more positive in the more productive school than in the less productive school? Questionnaire data supported findings of nine statistically significant differences between schools in the attitudes of students. Eight of these found students in the more productive school to have more positive attitudes than students in the less productive school. Therefore, the student human-relations in the more productive school were more positive, in general, than the student human-relations in the less productive school.

The one finding where students in the less productive school had more positive attitudes than students in the more productive school was in their attitudes toward teachers. Students in the less productive school whose parents had at least a high school education, but less than a four year degree from college had significantly more positive attitudes toward teachers than students in the more productive school whose parents had comparable levels of education. This one finding could have been passed over lightly except for one fact. Over-achieving students were found to have more positive attitudes toward teachers than under-achieving students when the sample populations of the two schools were pooled. How can this apparent inconsistency be explained?

The interview data may explain part of this inconsistency. Academic achievement may have been valued more highly in the more productive school than in the less productive school. Both male and female students in the less productive school believed participation in sports and sports-related activities was more instrumental to popularity than students in the more productive school. These data also revealed that good scholarship was believed to be more instrumental to popularity for female students in the more productive school than for female students in the less productive school. Apparently, the normative climates of the schools differed. Academic achievement being valued more highly in the more productive school than in the less productive school and participation in sports more highly valued in the less productive school than in the more productive school.

Of special interest at this point is that the interview data revealed only one sport or sports-related activity which was named by all four groups as having the most popular female students in the less productive school as participants--cheerleading. Even though participation in sports and sports-related activities was valued highly, female students in the less productive school may have been more limited in those kinds of activities (perceived to be instrumental to popularity) than female students in the more productive school. The result of this situation may have been reflected in the finding from questionnaire data that female students in the less productive school had significantly more negative attitudes toward their fellow students than female students in the more productive school.

But what about the attitudes of students toward teachers? If having a more positive attitude toward teachers was a sufficient condition for higher achievement, then perhaps the academic productivity of the two schools should have been reversed. The interview data revealed the most popular teachers in the two schools were more alike than they were different. However, these data did support findings that the most popular teachers in the more productive school were those who were "active" and "involved," whereas the most popular teachers in the less productive school were were those who would "bend rules" and "give students a break." Giving students a break could be interpreted as meaning the most popular teachers in the less productive school did not maintain academic standards which were as high as those in the more productive school. This position was supported by the questionnaire data. Although not statistically significant, students in the more productive school whose parents had the highest levels of education had more positive attitudes toward teachers than students in the less productive school whose parents had comparable levels of education. Therefore, the teachers in the less productive school may have contributed to a normative climate in which academic achievement was not valued as highly as in the more productive school.

The bending of rules by teachers in the less productive school may have been indicative of the support they gave the school administration. In his investigations, Adkinson found that negative attitudes toward the principal were much more widespread among the teachers in the less productive school than in the more productive school.[1]

The questionnaire data supported findings that all groups of students in the more productive school, except male students, had significantly more positive attitudes toward the principal than paired groups in the less productive school. Although not statistically significant, male students in the more productive school also had more positive attitudes toward the principal than male students in the less productive school. Interview data supported findings that both male and female students in the more productive school had more positive attitudes toward the principal than students in the less productive school. In addition, data gathered in interviews also revealed that the principal in the more productive school had contact with more students than the principal in the less productive school.

The principal in the more productive school was better liked by students than the principal in the less productive school. This could have been because the principal in the more productive school had more contact with students than the principal in the less productive school. Also, the teachers in the more productive school were more supportive of the principal than the teachers in the less productive school. Thus the attitudes of students toward the principals may have been a reflection of the attitudes of teachers toward the principals.

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[1] Adkinson, "Adult Social Systems."

All groups of students in the more productive school, except male students and those whose parents had less than a high school education, had more positive attitudes toward school as a whole than matched groups in the less productive school. This could be explained, in part, by the apparent difference in the normative climates of the two schools. A higher value on academic achievement in the more productive school may have been more consistent with the values the students brought with them when they enrolled in the schools than the climate which existed in the less productive school. Another contributory factor may have been the more limited opportunities for achieving popularity in the less productive school. Such a situation would likely result in student dissatisfaction and be reflected in their attitudes toward school as a whole.

One explanation for over-achieving students having more positive attitudes toward teachers than under-achieving students is that the students exerted more effort to achieve for those teachers they liked. However, having more positive attitudes toward teachers apparently was not a sufficient condition for higher achievement. It may have also been necessary that teachers were perceived as placing a high value on academic achievement. Whatever relationships may have existed in the two schools between the attitudes of students toward teachers and academic achievement may have also existed between the attitudes of teachers toward the principals and the efforts they exerted to teach academic skills in their classrooms.

Although the studies reported in Chapter II used different measures of the attitudes and achievement of students, the findings of this study were consistent with the findings of several of those studies. Brodie reported that satisfied students had higher achievement than dissatisfied students.[1] In this study, students in the more productive school had more positive attitudes, in general, than the students in the less productive school. McDill et al. found that schools which had normative climates in which academic achievement was emphasized and rewarded also had higher academic achievement.[2] In the preceding pages data were discussed which supported the position that the more productive school had a normative climate in which academic achievement was valued more highly than in the less productive school.

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[1] Thomas A. Brodie, Jr., "Attitude Toward School and Academic Achievement," Personnel and Guidance Journal 43 (1964): 375-78.

[2] Edward L. McDill, Edmund D. Meyers, Jr., and Leo C. Rigsby, "Institutional Effects on the Academic Behavior of High School Students," Sociology of Education 40 (1967): 181-99.

The findings of this study were also consistent with the reported findings of other studies in which positive relationships were found between students' attitudes toward teachers and achievement. Bledsoe et al. reported a positive relationship between the grades of students and their attitudes toward teachers.[1] Holtzman and Brown also reported a positive correlation between the attitudes of students toward teachers and grade point averages.[2] Over-achieving students in this study were found to have more positive attitudes toward teachers than under-achieving students. However, in the less productive school, having more positive attitudes toward teachers was not a sufficient condition for higher achievement.

Possible explanations for the difference in the academic productivity of the two schools of this study were explored in the preceding discussion. Since this study was exploratory and not experimental in design, no cause and effect relationships were established. Therefore, the hypotheses which follow are suggested for future study.

1. Student human-relations are positive in schools that are characterized as highly productive.

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[1] Joseph C. Bledsoe, Iva D. Brown, and Arthur D. Strickland, "Factors Related to Pupil Observation Reports of Teachers and Attitudes Toward Their Teacher," Journal of Educational Research 65 (1971): 119-26.

[2] Wayne H. Holtzman and William F. Brown, "Evaluating the Study Habits and Attitudes of High School Students," Journal of Educational Psychology 60 (1969): 216-21.

2. Students have positive attitudes toward their fellow students and toward school as a whole when there are numerous opportunities available for achieving popularity.

3. Students who have positive attitudes toward teachers achieve at higher levels when they perceive that teachers value academic achievement highly than when they perceive that teachers place a lower value on academic achievement.

4. Teachers who have positive attitudes toward the principal emphasize academic achievement in their classrooms when they perceive that the principal values academic achievement highly.

5. There is a direct relationship between the attitudes of students toward the principal and the attitudes of teachers toward the principal when the interactions between the principal and students are infrequent.

APPENDICES

APPENDIX A

STUDENT BACKGROUND DATA

Future Educational Plans

1. Percent Who Were Uncertain About Future Educational Plans

School A - 20 School B - 16

2. Percent Who Were Certain They Did Not Want to Continue Their Education Beyond High School

School A - 10 School B - 3

3. Percent Planning on Pursuing a Nursing Career or Attending a Business, Vocational, Technical or Trade School

School A - 10 School B - 12

4. Percent Planning on Attending a Two-Year College

School A - 16 School B - 16

5. Percent Planning on Attending a Four-Year College

School A - 26 School B - 36

Note: Totals of less than 100 percent exist because of blank responses and incomplete reporting of data.

Parents' Occupations

1. Percent Who Were Skilled Labor

School A Fathers - 45 School B Fathers - 35

School A Mothers - 7 School B Mothers - 7

2. Percent Who Were Engaged in Manual Labor, Factory Work, Service Occupations or Household Work

School A Fathers - 0 School B Fathers - 3

School A Mothers - 8 School B Mothers - 6

3. Percent Who Were Engaged in Clerical, Sales or Civil Service Work

School A Fathers - 11 School B Fathers - 16

School A Mothers - 34 School B Mothers - 41

4. Percent of the Mothers Who Were Homemakers

School A - 33 School B - 24

5. Percent Who Were Self Employed or Business Managers

School A Fathers - 16 School B Fathers - 27

School A Mothers - 4 School B Mothers - 5

6. Percent Employed in Professions or Technical Work

School A Fathers - 20 School B Fathers - 13

School A Mothers - 10 School B Mothers - 2

7. Percent With Unknown Occupations

School A Fathers - 3 School B Fathers - 2

School A Mothers - 4 School B Mothers - 3

Note: Totals of less than 100 percent exist because of blank responses.

Parents' Education

1. Percent With Less Than a Ninth Grade Education

School A Fathers - 4 School B Fathers - 1

School A Mothers - 0 School B Mothers - 0

2. Percent With Some High School Training, But Not High School Graduates

School A Fathers - 14 School B Fathers - 14

School A Mothers - 20 School B Mothers - 14

3. Percent Who Were High School Graduates

School A Fathers - 33 School B Fathers - 35

School A Mothers - 46 School B Mothers - 45

4. Percent With Some College Training

School A Fathers - 18 School B Fathers - 17

School A Mothers - 10 School B Mothers - 14

5. Percent With Four Year Degree or Higher from College

School A Fathers - 14 School B Fathers - 17

School A Mothers - 6 School B Mothers - 11

6. Percent Who Attended a Business or Trade School

School A Fathers - 6 School B Fathers - 5

School A Mothers - 7 School B Mothers - 7

Note: Totals of less than 100 percent exist because of blank responses.

Family Income

1. Percent With Yearly Incomes of Less Than $3,000

   School A - 2 School B - 2

2. Percent With Yearly Incomes of More Than $3,000 but Less Than $6,000

   School A - 8 School B - 8

3. Percent With Yearly Incomes of More Than $6,000 but Less Than $9,000

   School A - 17 School B - 16

4. Percent With Yearly Incomes of More Than $9,000 but Less Than $12,000

   School A - 20 School B - 27

5. Percent With Yearly Incomes of More Than $12,000 but Less Than $15,000

   School A - 26 School B - 19

Note: Totals of less than 100 percent exist because of blank responses.

APPENDIX B

STUDENT ATTITUDE SCALE

(Recommended Form)

STUDENT ATTITUDE SCALE
By
J. A. BATTLE

(DEVELOPED IN THE UNIVERSITY OF FLORIDA STUDY ON EDUCATIONAL LEADERSHIP, 1953)

REMEMBER: This is just a scale to find out how you feel toward yourself and others in general, other students, your teachers, your school administrators and your school as a whole. This is NOT a test and therefore no grade will and can be assigned. There are no right and wrong answers in the sense that any one number should be put down. In giving true information on how you feel you can help your school become a better place for yourself, and fellow students and for future students. BE HONEST AND FAIR.

NOTE CAREFULLY: At the right hand top of the answer sheet (NOT THIS SHEET) write your grade and section, the name of your school, and whether you are a boy or girl.

DIRECTIONS FOR MARKING: Make no mark on these scale sheets. Also be sure to use the special pencil. Make your marks on the answer sheet for each item opposite the appropriate number. Using the measuring method below mark as black and as plain as possible under the letter that denotes how you feel. Be sure to erase completely if you feel that you must change your mind.

FOR ME

1. True or mostly true.
2. About half true and half false.
3. False or mostly false.

SAMPLE: 61. I do not like most of the students in my school.

If this is true for you or mosty true you would make a mark like this:

1 2 3
▮ || ||

But, if this item in your case was about half true and half false, you would make a mark like this:

1 2 3
|| ▮ ||

If the item is false or mostly false for you, you would make a mark like this:

1 2 3
|| || ▮

1. I think that I am too shy.
2. I often feel the need to make excuses for the way I act.
3. I often change the way I do things or what I believe in order to please someone else.
4. It worries me to think that some of the people I know may dislike me.
5. I feel that I have little to give to the helping of others.
6. I feel that I might be a failure if I don't make certain changes in my life.
7. When meeting a person for the first time, I want to know at once whether he or she likes me.
8. Although people sometimes praise me I feel that I do not really earn the praise.
9. I become afraid when I think of something I have done wrong or might do wrong in the future.
10. I would be happier if I didn't have certain faults or fears about myself.
11. I am not at ease at parties and other social affairs.
12. I don't know what I really want out of life.
13. I feel that I am too often left out of things.
14. When my feelings change from sad to happy and happy to sad I do not know why.
15. I feel unhappy much of the time.
16. I dislike several of my classmates.
17. Members of my class do not know each other well.
18. Students at this school are snobbish or "stuck up."
19. Many of my classmates do not act as old as their age.

20. A few students at this school run all the student affairs.

21. Many boys and girls at this school feel that they do not "belong" here.

22. There is little effort at this school to make new students feel "at home."

23. Students at this school do not try to help other students who are in trouble.

24. I find it hard to take a real interest in the activities of some of my friends.

25. When I am first getting to know a person of my age I compare him or her with me to see whether I am better or not as good as this person.

26. I think that my teachers in general will not listen enough to student ideas.

27. I feel that few of my teachers are willing to help one student at a time, (that is to help a student individually).

28. Some of my teachers favor girls more than boys.

29. Some of my teachers favor boys more than girls.

30. Not many of my teachers are up-to-date (as they are behind the times) in what they teach and how they teach it.

31. I feel that many of my teachers think I know less than I do know.

32. It seems to me that some of my teachers often talk unkindly to students.

33. It seems to me that several of my teachers are nervous and easily excited.

34. Some of my teachers are always using words that are too big for me to understand.

35. I believe that most of my teachers are too strict.

36. My teachers expect too much of me.

37. I believe I have a teacher who would give a higher grade because a student complimented him or her or did a favor for the teacher.

38. I hate at least one of my teachers.

39. I think that some of my teachers seem to feel that they are always right and the student is always wrong.

40. I believe that some of my teachers try to make students afraid of them.

41. It seems to me that some of my teachers are inclined to be "bossy."

42. I feel that none of my teachers grade fairly.

43. I believe that most of my teachers should be more pleasant and cheerful.

44. I think that most of my teachers would rather not see and talk to me when school is out.

45. In many of my classes I feel that the teachers do not want me to express my real opinion, thoughts or ideas.

46. I feel that the principal does not like suggestions from the students.

47. I think the principal is too strict.

48. I would not go to the principal's office to talk to him unless I was made to go.

49. I believe there are too many rules in this school.

50. I don't believe the principal would want to help me with a personal problem.

51. It seems to me that if a student is from a family who has more money, or is considered more important, that he or she will get better treatment from the principal.

52. I believe this school would run just as well without our principal.

53. I don't know what our principal does to make this school better.

54. There are many things about my principal that I wish he or she would improve.

55. I believe this school could be run much better.

56. It seems to me that my textbooks are "behind the times" or not up-to-date.

57. I don't believe that any of my courses or subjects will be useful to me in the work I might do when I finish school.

58. I think there is little opportunity or chance for students in this school of different grades to meet and get to know each other.

59. I think there are too many things that our school organizations are not allowed to do.

60. At this school art exhibits, musical programs, assembly programs, and the like are not put on to help students learn more but to show them off.

APPENDIX C

STATE-WIDE ACHIEVEMENT DATA

Headings

APT = percentiles for the aptitude section of the Florida State-Wide Twelfth Grade Test.

N = the number of students assigned to the indicated aptitude percentile for the 1973-1974 school year.

MEAN = the mean achievement score on the Florida State-Wide Twelfth Grade Test at the indicated aptitude percentile for the 1973-1974 school year.

STD. DEV. = the standard deviation of achievement scores at the indicated aptitude percentiles for the 1973-1974 school year.

APT	N	MEAN	STD. DEV.
5	800	54.08	34.17
6	900	58.94	35.72
7	947	62.87	40.14
8	0	0.0	0.0
9	1101	65.24	40.85
10	1092	70.36	39.41
11	0	0.0	0.0
12	1141	74.18	38.76
13	1158	79.61	40.81
14	0	0.0	0.0
15	1236	85.71	42.32
16	0	0.0	0.0
17	1284	94.70	46.34
18	1269	98.64	45.96
19	0	0.0	0.0
20	1304	105.33	46.46
21	0	0.0	0.0
22	1218	112.66	47.69
23	0	0.0	0.0
24	1311	118.46	47.55
25	1337	125.89	48.06
26	0	0.0	0.0

APT	N	MEAN	STD. DEV.
27	1335	133.33	49.46
28	0	0.0	0.0
29	1333	137.33	48.14
30	0	0.0	0.0
31	1441	147.58	48.45
32	0	0.0	0.0
33	1458	150.83	49.05
34	0	0.0	0.0
35	1495	157.01	50.64
36	0	0.0	0.0
37	1441	162.02	49.48
38	0	0.0	0.0
39	1470	170.31	49.57
40	0	0.0	0.0
41	1448	177.02	50.78
42	0	0.0	0.0
43	1464	185.04	50.30
44	0	0.0	0.0
45	1427	188.85	49.37
46	0	0.0	0.0
47	1536	197.03	50.51
48	0	0.0	0.0

APT	N	MEAN	STD. DEV.
49	0	0.0	0.0
50	1635	202.20	50.18
51	0	0.0	0.0
52	1500	209.07	48.22
53	0	0.0	0.0
54	1578	213.85	50.15
55	0	0.0	0.0
56	1557	221.47	48.33
57	0	0.0	0.0
58	1485	225.22	49.16
59	0	0.0	0.0
60	0	0.0	0.0
61	1501	234.51	47.72
62	0	0.0	0.0
63	1449	241.61	48.51
64	0	0.0	0.0
65	1448	248.71	46.00
66	0	0.0	0.0
67	1459	253.83	46.60
68	0	0.0	0.0
69	1374	259.30	45.72
70	0	0.0	0.0

APT	N	MEAN	STD. DEV.
71	1311	264.14	45.01
72	0	0.0	0.0
73	1314	271.46	43.07
74	0	0.0	0.0
75	1372	278.72	42.63
76	1280	281.31	42.71
77	0	0.0	0.0
78	1209	287.11	40.40
79	0	0.0	0.0
80	1140	295.83	39.16
81	0	0.0	0.0
82	1172	299.79	38.98
83	1062	304.57	36.75
84	0	0.0	0.0
85	1052	305.95	37.69
86	952	314.48	35.27
87	910	320.18	34.59
88	0	0.0	0.0
89	893	322.37	33.96
90	864	330.25	30.97
91	783	334.45	29.16
92	680	339.49	28.45
93	674	342.58	26.91
94	585	347.03	26.26

APPENDIX D

STUDENT QUESTIONNAIRE

NAME____

I. How far in school did your father go?

___A. less than the sixth grade.

___B. completed the sixth grade but not the ninth.

___C. completed the ninth grade but didn't graduate from high school.

___D. graduated from high school, but didn't go on to a business school, trade school or college.

___E. attended some business school, trade school or college but didn't graduate from college.

___F. graduated from college but didn't get a master's degree.

___G. received a master's degree or higher from college.

___H. I don't know.

II. How far in school did your mother go?

___A. less than the sixth grade.

___B. completed the sixth grade but not the ninth.

___C. completed the ninth grade but didn't graduate from high school.

___D. graduated from high school, but didn't go on to a business school, trade school or college.

___E. attended some business school, trade school or college but didn't graduate from college.

___F. graduated from college but didn't get a master's degree.

___G. received a master's degree or higher from college.

___H. I don't know.

Mostly True (MT)	Half True Half False (S)	Mostly False (MF)		
//	//	//	1.	I think I am too shy.
//	//	//	2.	I often feel the need to make excuses for the way I act.
//	//	//	3.	I often change the way I do things or what I believe in order to please someone else.
//	//	//	4.	It worries me to think that some of the people I know dislike me.
//	//	//	5.	I feel that I have little to give to the helping of others.
//	//	//	6.	I feel that I might be a failure if I don't make certain changes in my life.
//	//	//	7.	When meeting a person for the first time, I want to know at once whether he or she likes me.
//	//	//	8.	Although people sometimes praise me, I feel that I do not really earn the praise.
//	//	//	9.	I become afraid when I think of something I have done wrong or might do wrong in the future.
//	//	//	10.	I would be happier if I didn't have certain faults or fears about myself.
//	//	//	11.	I am not at ease at parties and other social affairs.
//	//	//	12.	I don't know what I really want out of life.
//	//	//	13.	I feel that I am too often left out of things.

(MT)	(S)	(MF)	
//	//	//	14. When my feelings change from sad to happy and happy to sad, I don't know why.
//	//	//	15. I feel unhappy much of the time.
//	//	//	16. I dislike several of my classmates.
//	//	//	17. Members of my class do not know each other well.
//	//	//	18. Students at this school are snobbish and "stuck up."
//	//	//	19. Many of my classmates do not act as old as their age.
//	//	//	20. A few students at this school run all of the student affairs.
//	//	//	21. Many boys and girls at this school feel that they do not "belong" here.
//	//	//	22. There is little effort at this school to make new students feel "at home."
//	//	//	23. Students at this school do not try to help other students who are in trouble.
//	//	//	24. I find it hard to take a real interest in the activities of some of my friends.
//	//	//	25. When I am first getting to know a person of my age, I compare him or her with me to see whether I am better or not as good as this person.
//	//	//	26. I think that my teachers in general will not listen enough to student ideas.
//	//	//	27. I feel that few of my teachers are willing to help one student at a time (that is to help a student individually).

(MT)	(S)	(MF)	
//	//	//	28. Some of my teachers favor girls more than boys.
//	//	//	29. Some of my teachers favor boys more than girls.
//	//	//	30. Not many of my teachers are up-to-date (as they are behind the times) in what they teach and how they teach it.
//	//	//	31. I feel that many of my teachers think I know less than I do know.
//	//	//	32. It seems to me that some of my teachers often talk unkindly to students.
//	//	//	33. It seems to me that several of my teachers are nervous and easily excited.
//	//	//	34. Some of my teachers are always using words that are too big for me to understand.
//	//	//	35. I believe that most of my teachers are too strict.
//	//	//	36. My teachers expect too much of me.
//	//	//	37. I believe I have a teacher who would give a higher grade because a student complimented him or her or did a favor for the teacher.
//	//	//	38. I hate at least one of my teachers.
//	//	//	39. I think that some of my teachers seem to feel that they are always right and the student is always wrong.
//	//	//	40. I believe that some of my teachers try to make students afraid of them.
//	//	//	41. It seems to me that some of my teachers are inclined to be "bossy."

(MT)	(S)	(MF)	
/ /	/ /	/ /	42. I feel that none of my teachers grade fairly.
/ /	/ /	/ /	43. I believe that most of my teachers should be more pleasant and cheerful.
/ /	/ /	/ /	44. I think that most of my teachers would rather not see and talk to me when school is out.
/ /	/ /	/ /	45. In many of my classes I feel that the teachers do not want me to express my real opinion, thoughts or ideas.
/ /	/ /	/ /	46. I feel that the principal does not like suggestions from the students.
/ /	/ /	/ /	47. I think the principal is too strict.
/ /	/ /	/ /	48. I would not go to the principal's office to talk to him unless I was made to go.
/ /	/ /	/ /	49. I believe there are too many rules in this school.
/ /	/ /	/ /	50. I don't believe the principal would want to help me with a personal problem.
/ /	/ /	/ /	51. It seems to me that if a student is from a family who has more money, or is considered more important that he or she will get better treatment from the principal.
/ /	/ /	/ /	52. I believe this school would run just as well without our principal.
/ /	/ /	/ /	53. I don't know what our principal does to make this school better.
/ /	/ /	/ /	54. There are many things about my principal that I wish he or she would improve.
/ /	/ /	/ /	55. I believe this school could be run much better.

(MT)	(S)	(MF)	
//	//	//	56. It seems to me that my textbooks are "behind the times" or not up-to-date.
//	//	//	57. I don't believe that any of my courses or subjects will be useful to me in the work I might do when I finish school.
//	//	//	58. I think there is little opportunity or chance for students in this school or different grades to meet and get to know each other.
//	//	//	59. I think there are too many things that our school organizations are not allowed to do.
//	//	//	60. At this school art exhibits, musical programs, assembly programs, and the like are not put on to help students learn more but to show them off.

APPENDIX E

SUMMARY OF QUESTIONNAIRE DATA

Blank Responses

The following students did not respond to the items listed:

Student I. D. Number	Items Left Blank (Number)
356	58
352	56
351	43
344	41-60
341	42
328	45, 46
320	35
313	21, 50
300	3, 50
274	60
239	21
217	23
214	17
213	3
207	59
195	17
192	16-30
143	9, 14
135	2
131	21
130	1-15
127	2
105	51
96	47-60
87	45
62	13
59	29
58	1-25, 28, 29, 31, 34, 35, 42-45, 50, 52, 57, 58, 60

Headings

Column	Definition
A	Student I. D. Number
B	School
C	Sex
D	Parents' Education Score
E	Aptitude Percentile on the Florida State-Wide Twelfth Grade Test
F	Total Score on the Florida State-Wide Twelfth Grade Test
G	Student's Acceptance of Self Score
H	Student's Attitude Toward Fellow Students Score
I	Student's Attitude Toward Teachers Score
J	Student's Attitude Toward the Principals Score
K	Student's Attitude Toward School as a Whole Score

A	B	C	D	E	F	G	H	I	J	K
1	A	F	8	69	350	37	22	50	25	16
2	A	F	8	39	229	32	21	32	11	13
3	A	F	7	5	64	36	17	31	12	11
4	A	F	12	50	207	40	20	44	26	16
5	A	F	10	33	123	40	24	51	23	12
6	A	F	10	27	177	35	23	52	25	14
7	A	F	10	17	173	44	24	27	14	7
8	A	F	8	43	191	39	20	46	22	15
9	A	F	10	31	188	34	15	30	16	7
10	A	F	4	27	96	28	19	36	18	8
11	A	F	7	24	97	39	26	44	27	16
12	A	F	8	98	475	38	26	56	25	16
13	A	F	10	58	329	36	24	52	24	17
14	A	F	8	71	366	40	26	46	27	15
15	A	F	7	5	103	35	27	59	26	18
16	A	F	8	18	126	39	15	33	17	12
17	A	F	6	61	299	35	13	25	10	11
18	A	F	8	24	97	39	21	35	26	11
19	A	F	8	89	446	43	22	56	15	15
20	A	F	9	41	201	33	24	45	17	14
21	A	F	8	37	130	34	19	28	20	10
22	A	F	9	76	352	38	27	56	25	17

A	B	C	D	E	F	G	H	I	J	K
23	A	F	3	33	145	29	21	39	22	10
24	A	F	9	71	350	29	27	47	24	16
25	A	F	8	7	100	37	21	49	26	16
26	A	F	8	39	260	35	27	47	26	17
27	A	F	8	43	228	38	23	45	26	17
28	A	F	11	24	172	40	24	54	25	13
29	A	F	9	35	244	42	19	40	18	10
30	A	F	7	73	369	43	25	55	17	15
31	A	F	10	27	140	43	25	54	26	17
32	A	F	11	63	376	36	27	53	15	14
33	A	F	6	71	295	36	26	50	26	16
34	A	F	14	9	115	36	19	41	21	12
35	A	F	9	24	153	38	26	48	26	18
36	A	F	8	61	259	29	21	43	20	14
37	A	F	14	75	403	42	29	60	27	18
38	A	F	11	63	231	39	23	52	20	15
39	A	F	9	13	87	32	24	37	19	14
40	A	F	9	69	355	36	28	55	19	17
41	A	F	5	65	318	36	23	55	21	17
42	A	F	9	37	256	36	19	41	14	15
43	A	F	9	35	155	39	26	34	25	11
44	A	F	9	65	350	39	24	57	16	15
45	A	F	7	41	151	40	18	32	17	12

A	B	C	D	E	F	G	H	I	J	K
46	A	F	10	92	469	34	16	48	25	15
47	A	F	6	20	91	32	15	45	26	13
48	A	F	11	91	449	40	20	48	26	14
49	A	F	5	18	86	38	23	45	25	14
50	A	F	10	73	404	30	18	49	18	14
51	A	F	11	27	113	38	22	39	17	13
52	A	F	8	65	267	32	15	46	18	15
53	A	F	8	50	174	40	18	47	27	12
54	A	F	8	86	437	28	23	41	17	8
55	A	F	7	91	447	37	23	52	15	17
56	A	F	10	39	140	28	23	51	26	16
57	A	F	5	6	69	27	19	38	12	11
58	A	F	9	39	228	30	20	35	13	8
59	A	F	6	41	176	33	22	32	17	14
60	A	F	14	41	250	43	21	60	20	16
61	A	F	9	89	424	27	25	34	21	12
62	A	F	9	75	401	37	26	54	23	17
63	A	F	8	29	180	37	23	38	22	15
64	A	F	9	75	321	40	25	55	27	14
65	A	F	10	67	413	29	22	56	27	16
66	A	F	9	52	321	36	26	54	27	18
67	A	F	7	24	122	28	21	36	21	10
68	A	F	9	35	218	30	21	42	23	16

A	B	C	D	E	F	G	H	I	J	K
69	A	F	7	54	299	35	19	52	27	15
70	A	F	9	41	309	36	23	43	23	16
71	A	F	10	56	276	38	21	41	12	12
72	A	F	8	47	177	36	19	33	17	10
73	A	F	13	25	251	31	27	56	26	14
74	A	F	11	93	459	43	23	52	26	16
75	A	F	9	27	177	41	16	46	25	15
76	A	F	8	24	81	35	16	30	19	11
77	A	F	8	10	184	38	20	48	21	14
78	A	F	10	91	440	39	20	54	25	18
79	A	F	6	17	120	39	24	41	27	15
80	A	F	10	67	388	40	18	37	25	14
81	A	F	11	50	230	37	20	42	23	11
82	A	F	6	20	128	34	23	53	23	17
83	A	F	9	82	304	42	22	40	20	11
84	A	F	7	15	118	40	22	45	23	13
85	A	F	8	56	273	36	20	55	26	17
86	A	F	8	56	358	36	24	50	23	15
87	A	F	10	13	107	31	17	44	18	12
88	A	F	11	54	360	38	20	56	26	16
89	A	F	9	78	385	39	18	41	11	12
90	A	F	9	2	112	33	25	45	17	11

A	B	C	D	E	F	G	H	I	J	K
91	A	F	8	56	307	38	27	53	16	15
92	A	F	9	3	89	38	18	33	21	14
93	A	F	8	73	315	37	18	48	26	15
94	A	F	10	58	276	21	18	42	24	16
95	A	F	12	96	454	31	19	52	23	16
96	A	F	8	52	276	37	26	57	21	12
97	A	F	8	43	180	34	22	42	22	12
98	A	F	8	52	262	32	17	53	22	15
99	A	F	10	65	272	36	18	42	18	9
100	A	F	10	54	245	43	25	54	25	15
101	A	F	6	45	311	44	22	46	24	14
102	A	F	8	54	315	40	22	48	26	15
103	A	F	11	90	402	36	24	51	15	14
104	A	F	10	52	240	42	24	55	25	15
105	A	F	8	78	348	37	25	49	19	12
106	A	F	5	24	81	38	19	46	25	15
107	A	F	10	56	368	31	17	31	15	12
108	A	F	9	54	357	43	23	45	22	12
109	A	F	10	39	236	38	16	49	25	13
110	A	F	10	75	345	37	21	44	24	12
111	A	F	12	54	289	43	20	55	23	16
112	A	F	10	37	232	34	22	51	22	16
113	A	F	10	76	328	41	25	58	27	17

A	B	C	D	E	F	G	H	I	J	K
114	A	F	7	6	128	33	23	44	21	15
124	A	M	8	65	275	40	20	46	23	13
125	A	M	10	97	481	35	25	48	18	14
126	A	M	4	29	120	36	23	41	25	14
127	A	M	8	31	134	33	24	51	20	13
128	A	M	8	10	32	39	27	48	21	13
129	A	M	9	58	237	44	21	33	15	10
130	A	M	8	27	199	30	25	53	23	13
131	A	M	10	52	354	36	25	49	26	17
132	A	M	11	73	374	37	21	59	23	15
133	A	M	8	85	418	41	24	58	27	18
134	A	M	8	61	319	32	24	52	24	14
135	A	M	7	35	178	40	20	53	20	16
136	A	M	9	85	396	26	17	43	18	11
137	A	M	6	37	131	34	23	41	18	12
138	A	M	6	39	208	37	21	39	22	12
139	A	M	11	78	408	41	23	59	18	15
140	A	M	8	39	261	43	22	57	26	11
141	A	M	6	45	289	41	26	51	21	12
142	A	M	8	17	80	41	22	54	23	17
143	A	M	10	58	371	37	27	57	27	17
144	A	M	9	69	329	34	28	60	23	15
145	A	M	14	9	122	40	16	48	20	13
146	A	M	8	96	477	41	17	47	16	14

A	B	C	D	E	F	G	H	I	J	K
147	A	M	11	67	383	41	28	38	21	11
148	A	M	9	80	334	42	27	58	27	18
149	A	M	12	76	424	35	23	56	24	16
150	A	M	7	24	239	39	24	53	22	14
151	A	M	8	63	316	37	18	34	11	8
152	A	M	8	41	175	36	16	46	22	15
153	A	M	6	67	317	31	21	39	17	11
154	A	M	8	20	118	35	16	29	9	8
155	A	M	7	50	297	41	16	42	25	16
156	A	M	10	47	233	28	22	32	14	6
157	A	M	9	99	488	34	25	54	23	15
158	A	M	6	27	161	31	25	43	19	11
159	A	M	9	39	229	35	23	56	24	17
160	A	M	8	95	458	36	23	53	23	16
161	A	M	9	94	455	37	22	55	20	13
162	A	M	10	69	377	43	30	56	25	18
163	A	M	4	6	111	38	23	44	24	16
164	A	M	10	63	351	43	25	47	22	14
165	A	M	8	76	408	34	23	53	19	13
166	A	M	10	50	288	42	24	47	25	16
167	A	M	8	50	232	40	14	50	24	14
168	A	M	8	56	316	42	20	31	13	14
169	A	M	8	29	228	38	26	56	18	16

A	B	C	D	E	F	G	H	I	J	K
170	A	M	8	65	272	36	24	41	23	15
171	A	M	8	17	133	45	27	41	24	16
172	A	M	8	43	240	45	25	56	27	15
173	A	M	9	20	151	34	25	42	15	8
174	A	M	11	89	452	36	23	49	22	12
175	A	M	8	43	220	28	21	44	19	11
176	A	M	6	35	127	38	21	43	19	12
177	A	M	11	47	302	33	16	41	16	13
178	A	M	8	63	332	34	24	52	20	13
179	A	M	7	35	157	38	22	49	27	15
180	A	M	10	82	366	38	19	35	12	10
181	A	M	12	50	299	39	21	52	20	14
182	A	M	10	99	489	32	17	36	13	12
183	A	M	10	71	381	36	18	50	16	12
184	A	M	9	73	371	28	15	43	16	9
185	A	M	10	75	280	35	17	31	10	11
186	A	M	8	97	472	37	22	52	19	11
187	A	M	6	20	166	33	24	52	27	14
188	A	M	9	56	282	42	16	29	12	10
189	A	M	7	50	202	45	30	60	27	18
190	A	M	11	17	116	45	30	60	27	18
191	A	M	8	83	443	30	22	43	23	14

A	B	C	D	E	F	G	H	I	J	K
192	A	M	8	54	140	33	20	42	21	14
193	A	M	8	2	79	29	20	34	16	14
194	A	M	9	75	326	38	22	37	15	15
195	A	M	8	71	347	36	21	38	10	11
196	A	M	8	24	172	37	18	30	12	12
197	A	M	8	41	266	34	21	40	20	7
198	A	M	10	52	240	32	24	38	19	16
199	A	M	7	95	437	31	21	39	25	17
200	A	M	9	58	256	33	25	58	23	15
201	A	M	9	99	494	37	19	58	23	16
202	A	M	11	39	269	37	20	43	23	10
203	A	M	8	78	398	42	29	50	20	15
204	A	M	9	99	485	41	15	29	25	12
205	A	M	8	85	368	33	17	43	15	12
206	A	M	6	47	276	39	25	37	26	13
207	A	M	8	33	155	39	22	46	19	13
208	A	M	8	47	278	36	23	38	13	10
209	A	M	9	63	353	38	23	50	25	12
210	A	M	6	61	328	41	24	60	25	18
211	A	M	10	50	254	30	21	34	25	9
212	A	M	7	47	331	38	23	40	17	10
213	A	M	9	54	283	34	19	41	25	10

A	B	C	D	E	F	G	H	I	J	K
214	A	M	12	93	459	37	23	54	27	16
215	A	M	7	54	311	28	22	55	27	15
216	A	M	8	76	384	27	16	52	21	13
217	A	M	8	7	114	38	20	42	17	12
218	A	M	11	50	317	39	21	41	27	12
219	A	M	10	15	93	33	22	42	19	12
220	A	M	5	78	409	33	18	35	10	10
221	A	M	6	83	391	30	20	37	10	8
222	A	M	8	54	310	39	23	50	19	14
223	B	M	12	76	298	41	25	59	27	17
224	B	M	5	1	33	40	24	50	23	14
225	B	M	9	61	300	35	24	51	25	17
226	B	M	8	27	149	39	25	57	26	16
227	B	M	12	96	452	38	24	49	13	14
228	B	M	8	61	331	36	19	52	22	15
229	B	M	8	39	234	34	15	48	9	11
230	B	M	8	2	15	37	26	53	26	17
231	B	M	7	29	178	38	23	47	16	11
232	B	M	6	58	252	42	22	51	9	9
233	B	M	9	35	152	38	23	36	14	12
234	V	M	12	89	393	26	21	56	11	10
235	B	M	6	58	296	38	25	52	25	15
236	B	M	7	90	451	31	16	36	17	10

A	B	C	D	E	F	G	H	I	J	K
237	B	M	6	37	256	43	26	53	27	15
238	B	M	10	61	271	37	16	41	17	11
239	B	M	8	67	340	36	19	42	17	10
240	B	M	11	4	98	38	19	37	23	11
241	B	M	10	61	237	44	24	49	15	13
242	B	M	9	78	381	36	20	55	12	9
243	B	M	10	95	457	37	20	58	17	14
244	B	M	9	69	343	37	26	52	19	16
245	B	M	8	47	260	37	20	55	10	12
246	B	M	8	37	197	28	18	41	14	12
247	B	M	5	9	101	36	29	60	27	18
248	B	M	13	80	359	38	21	45	21	13
249	B	M	8	69	421	30	23	55	12	12
250	B	M	8	39	194	37	25	55	21	13
251	B	M	9	89	441	36	17	53	12	14
252	B	M	9	43	161	33	28	49	25	15
253	B	M	14	18	160	30	18	40	18	12
254	B	M	10	99	494	42	18	59	22	11
255	B	M	7	24	126	45	27	56	27	16
256	B	M	7	18	84	37	23	52	18	15
257	B	M	8	76	424	42	23	48	17	13
258	B	M	8	61	233	36	22	52	26	12
259	B	M	12	52	117	44	29	40	13	11

A	B	C	D	E	F	G	H	I	J	K
260	B	M	11	58	344	38	28	42	16	13
261	B	M	8	63	320	38	22	39	11	9
262	B	M	11	45	226	41	19	52	16	15
263	B	M	7	10	209	38	13	28	12	6
264	B	M	10	76	391	35	25	57	22	10
265	B	M	6	6	101	25	22	54	22	13
266	B	M	8	82	416	27	20	54	27	15
267	B	M	11	39	228	42	24	47	25	14
268	B	M	8	31	264	43	28	45	21	10
269	B	M	9	25	190	39	19	60	25	17
270	B	M	11	45	290	40	24	36	12	9
271	B	M	6	56	316	34	22	39	14	14
272	B	M	7	82	428	25	23	46	14	14
273	B	M	13	61	313	34	20	41	14	11
274	B	M	8	67	329	30	20	31	24	13
275	B	M	9	56	355	41	17	54	24	17
276	B	M	8	99	484	31	24	41	25	12
277	B	M	8	33	215	40	20	53	14	11
278	B	M	9	61	239	37	20	32	27	17
279	B	M	8	89	310	34	23	48	12	12
280	B	M	9	41	200	27	20	50	17	13
281	B	M	9	92	458	39	25	58	23	13

A	B	C	D	E	F	G	H	I	J	K
282	B	M	8	67	382	40	23	32	17	10
297	B	F	10	45	216	38	18	39	12	11
298	B	F	7	69	386	33	14	38	24	10
299	B	F	7	24	175	30	19	26	11	9
300	B	F	8	1	49	30	14	26	12	7
301	B	F	6	39	186	36	19	45	14	9
302	B	F	7	50	294	34	21	45	11	10
303	B	F	10	43	236	32	23	49	12	11
304	B	F	10	85	339	34	25	46	17	12
305	B	F	10	86	453	38	21	51	16	14
306	B	F	8	39	171	35	22	54	25	14
307	B	F	12	20	137	38	21	50	10	12
308	B	F	7	31	217	38	22	35	9	11
309	B	F	7	15	81	36	16	29	15	11
310	B	F	8	75	354	34	19	41	19	13
311	B	F	11	17	189	30	16	35	14	11
312	B	F	8	31	98	36	22	50	17	11
313	B	F	7	37	190	25	21	57	23	15
314	B	F	5	41	136	36	22	42	20	14
315	B	F	14	75	307	39	19	49	21	14
316	B	F	8	22	184	38	14	49	21	17
317	B	F	8	89	367	36	22	43	20	14

A	B	C	D	E	F	G	H	I	J	K
318	B	F	11	87	404	32	16	40	11	14
319	B	F	11	91	465	29	23	50	16	15
320	B	F	8	39	238	31	16	48	17	12
321	B	F	8	65	357	21	18	41	10	14
322	B	F	12	75	413	34	16	56	13	12
323	B	F	7	29	155	35	20	38	10	9
324	B	F	10	50	274	40	20	44	16	12
325	B	F	14	75	395	40	15	40	10	9
326	B	F	14	54	346	39	22	58	24	16
327	B	F	9	18	115	34	24	49	16	11
328	B	F	9	76	392	38	18	58	11	13
329	B	F	14	65	338	39	16	44	13	11
330	B	F	8	50	263	30	20	55	16	14
331	B	F	7	41	145	35	19	50	17	15
332	B	F	11	83	445	42	20	54	21	15
333	B	F	8	9	33	36	17	45	17	16
334	B	F	10	80	402	38	26	45	14	11
335	B	F	9	58	200	33	19	48	16	12
336	B	F	11	29	171	27	13	37	9	10
337	B	F	10	89	442	32	20	38	15	12
338	B	F	8	50	314	38	21	40	11	10
339	B	F	9	73	315	17	10	41	11	15

A	B	C	D	E	F	G	H	I	J	K
340	B	F	8	45	132	34	17	50	24	14
341	B	F	13	54	318	25	17	32	11	12
342	B	F	8	94	420	36	18	43	13	9
343	B	F	8	63	302	42	26	47	11	13
344	B	F	9	43	197	31	17	48	18	12
345	B	F	8	33	154	39	19	40	11	10
346	B	F	8	65	353	35	19	52	18	16
347	B	F	10	54	323	35	17	54	11	7
348	B	F	9	22	182	32	14	51	10	11
349	B	F	9	39	187	17	13	36	12	8
350	B	F	11	85	368	22	23	41	12	11
351	B	F	12	81	405	34	17	49	11	12
352	B	F	10	31	201	27	20	44	16	13
353	B	F	5	45	178	28	18	55	16	11
354	B	F	10	69	295	43	19	46	27	16
355	B	F	11	45	156	42	24	36	18	9
356	B	F	9	61	363	28	24	53	11	12
357	B	F	9	24	184	39	21	58	18	15
358	B	F	10	47	302	40	25	50	22	13
359	B	F	9	95	396	36	23	53	24	15
360	B	F	9	80	391	43	25	49	22	13
361	B	F	9	50	160	37	27	53	26	16

A	B	C	D	E	F	G	H	I	J	K
362	B	F	13	35	187	31	20	34	9	11
363	B	F	7	65	267	45	18	41	13	12
364	B	F	10	43	183	39	26	52	23	16
365	B	F	12	45	252	30	19	34	12	10
366	B	F	7	47	207	43	18	47	20	9
367	B	F	11	31	196	40	26	59	24	17
368	B	F	11	85	469	36	16	49	14	9
369	B	F	8	50	250	39	25	52	19	15
370	B	F	4	96	471	40	10	41	11	11
371	B	F	6	6	37	39	27	46	20	18
372	B	F	11	82	355	42	23	59	27	18

APPENDIX F

SUMMARY OF INTERVIEW DATA

Interview Guide

(1) What clubs do the most popular boys belong to?

(2) What sports do the most popular boys participate in?

(3) What kind of scholars are the most popular boys?

(4) If a boy wanted to be the most popular boy in this school, where should he direct his efforts? Rank club membership, sports, and scholarship in order of priority.

(5) What clubs do the most popular girls belong to?

(6) What sports or sports-related activities do the most popular girls participate in?

(7) What kind of scholars are the most popular girls?

(8) If a girl wanted to be the most popular girl in this school, where should she direct her efforts? Rank club membership, sports, and scholarship in order of priority.

(9) How would you describe the most popular teachers in this school?

(10) How would you describe the most unpopular teachers in this school?

(11) Who do you think likes the principal the best, boys or girls? Why?

(12) What should the school do to help students get to know each other better?

(13) If you could make a suggestion or send a message to the principal without him knowing where it came from, what would you tell him?

Students Interviewed

The identification numbers of the students interviewed in the two schools are as follows:

School A females with parents' education scores of two through seven: 84, 106, 101, 82, 55, 114.

School B females with parents' education scores of two through seven: 301, 370, 363, 353, 298.

School A males with parents' education scores of two through seven: 163, 155, 138, 135, 215, 126.

School B males with parents' education scores of two through seven: 265, 231, 271, 232, 224.

School A females with parents' education scores of eleven through fourteen: 48, 4, 28, 88, 81, 73, 38, 95.

School B females with parents' education scores of eleven through fourteen: 351, 329, 368, 325, 355, 318, 307.

School A males with parents' education scores of eleven through fourteen: 181, 149, 218, 174, 214, 139, 132, 147.

School B males with parents' education scores of eleven through fourteen: 260, 248, 240, 262, 259, 234, 227.

Students' responses to each of the thirteen questions are presented in summary form in the pages which follow.

(1) What clubs do the most popular boys belong to?

School A females with parents' education scores of two through seven: Senior Class Officers, Student Council, Interact, Keyettes mascot, Omega, Key, Epsilon, Fellowship of Christian Athletes.

School B females with parents' education scores of two through seven: Hi Y, Future Farmers of America, Key, "E" Club.

School A males with parents' education scores of two through seven: Fellowship of Christian Athletes, Key, National Honor Society, Senior Class Officers, Student Council, Omega.

School B males with parents' education scores of two through seven: Hi Y, Key, "E" Club.

School A females with parents' education scores of eleven through fourteen: Key, Omega, Student Council, Senior Class Officers.

School B females with parents' education scores of eleven through fourteen: Hi Y, "E" Club, Tri Hi Y.

School A males with parents' education scores of eleven through fourteen: Key, Interact, Fellowship of Christian Athletes, Student Council, Omega, Senior Class Officers.

School B males with parents' education scores of eleven through fourteen: Hi Y, "E" Club, Civenettes mascot, Student Council.

(2) What sports do the most popular boys participate in?

School A females with parents' education scores of two through seven: Football, Baseball, Track.

School B females with parents' education scores of two through seven: Football, Basketball, Baseball.

School A males with parents' education scores of two through seven: Football, Basketball, Track, Baseball, Wrestling.

School B males with parents' education scores of two through seven: Football, Basketball, Track, Baseball.

School A females with parents' education scores of eleven through fourteen: Football, Basketball, Baseball, Track, Wrestling.

School B females with parents' education scores of eleven through fourteen: Football, Baseball, Basketball.

School A males with parents' education scores of eleven through fourteen: Football, Basketball, Baseball, Track, Swimming, Wrestling.

School B males with parents' education scores of eleven through fourteen: Football, Basketball.

(3) What kind of scholars are the most popular boys? (Only responses given in group interviews are recorded here).

School A females with parents' education scores of two through seven: Above average.

School B females with parents' education scores of two through seven: Average.

School A males with parents' education scores of two through seven: Above average.

School B males with parents' education scores of two through seven: Average.

School A females with parents' education scores of eleven through fourteen: Good.

School B females with parents' education scores of eleven through fourteen: Average.

School A males with parents' education scores of eleven through fourteen: B - C.

School B males with parents' education scores of eleven through fourteen: Average.

(4) If a boy wanted to be the most popular boy in this school, where should he direct his efforts? Rank club membership, sports, and scholarship in order of priority.

School A females with parents' education scores of two through seven: Clubs - 2, 2, 2, 2, 1, 3. Sports - 1, 1, 1, 1, 3, 1. Scholarship - 3, 3, 3, 3, 2, 2.

School B females with parents' education scores of two through seven: Clubs - 2, 2, 2, 2, 2. Sports - 1, 1, 1, 1, 1. Scholarship - 3, 3, 3, 3, 3.

School A males with parents' education scores of two through seven: Clubs - 2, 2, 2, 2, 1, 1. Sports - 1, 1, 1, 1, 2, 3. Scholarship - 3, 3, 3, 3, 3, 2.

School B males with parents' education scores of two through seven: Clubs - 2, 2, 2, 3, 2. Sports - 1, 1, 1, 1, 1. Scholarship - 3, 3, 3, 2, 3.

School A females with parents' education scores of eleven through fourteen: Clubs - 1, 1, 2, 3, 3, 3, 3, 2. Sports - 1, 1, 1, 2, 2, 3, 1, 1. Scholarship - 1, 2, 2, 3, 3, 2, 2, 3.

School B females with parents' education scores of eleven through fourteen: Clubs - 2, 2, 2, 2, 2, 2, 2. Sports - 1, 1, 1, 1, 1, 1, 1. Scholarship - 3, 3, 3, 3, 3, 3, 3.

School A males with parents' education scores of eleven through fourteen: Clubs - 2, 2, 2, 2, 2, 2, 2. Sports: 1, 1, 1, 1, 1, 1, 1. Scholarship - 3, 3, 3, 3, 3, 3, 3.

School B males with parents' education scores of eleven through fourteen: Clubs - 3, 3, 3, 3, 2, 2, 1. Sports: 1, 1, 1, 1, 1, 1, 2. Scholarship - 2, 2, 2, 2, 3, 3, 3.

(5) What clubs do the most popular girls belong to?

School A females with parents' education scores of two through seven: Keyettes, Senior Girls, Anchor, Student Council.

School B females with parents' education scores of two through seven: Senior Girls, Civenettes, Tri Hi Y.

School A males with parents' education scores of two through seven: National Honor Society, Keyettes, Epsilon, Senior Girls.

School B males with parents' education scores of two through seven: Senior Girls, Keyettes, Tri Hi Y, Girls Athletic Association.

School A females with parents' education scores of eleven through fourteen: Anchor, Keyettes, Senior Girls, Epsilon.

School B females with parents' education scores of eleven through fourteen: Tri Hi Y, Senior Girls, Civenettes, Inter-racial

Council, Student Council, French.

School A males with parents' education scores of eleven through fourteen: Keyettes, Anchor, Girls Athletic Association, Student Council, Fellowship of Christian Athletes.

School B males with parents' education scores of eleven through fourteen: Tri Hi Y, Civenettes, Senior Girls.

(6) What sports or sports-related activities do the most popular girls participate in?

School A females with parents' education scores of two through seven: Majorettes, Cheerleaders, Basketball, Track, Swimming.

School B females with parents' education scores of two through seven: Cheerleaders.

School A males with parents' education scores of two through seven: Majorettes, Cheerleaders, Basketball, Track.

School B males with parents' education scores of two through seven: Cheerleaders, Basketball, Track, Softball.

School A females with parents' education scores of eleven through fourteen: Softball, Swimming, Track, Cheerleaders, Tennis.

School B females with parents' education scores of eleven through fourteen: Cheerleaders, Basketball, Softball, Tennis.

School A males with parents' education scores of eleven through fourteen: Cheerleaders, Majorettes, Basketball, Volleyball, Softball.

School B males with parents' education scores of eleven through fourteen: Cheerleaders, Majorettes.

(7) What kind of scholars are the most popular girls? (Only responses given in group interviews are recorded here).

School A females with parents' education scores of two through seven: Average.

School B females with parents' education scores of two through seven: Average.

School A males with parents' education scores of two through seven: Above average.

School B males with parents' education scores of two through seven: Good.

School A females with parents' education scores of eleven through fourteen: Good.

School B females with parents' education scores of eleven through fourteen: Pretty smart.

School A males with parents' education scores of eleven through fourteen: C.

School B males with parents' education scores of eleven through fourteen: Pretty good.

(8) If a girl wanted to be the most popular girl in this school, where should she direct her efforts? Rank club membership, sports, and scholarship in order of priority.

School A females with parents' education scores of two through seven: Clubs - 1, 1, 1, 1, 2, 3. Sports - 2, 2, 2, 2, 3, 1. Scholarship - 3, 3, 3, 3, 1, 2.

School B females with parents' education scores of two through seven: Clubs - 2, 2, 2, 2, 2. Sports - 1, 1, 1, 1, 1. Scholarship - 3, 3, 3, 3, 3.

School A males with parents' education scores of two through seven: Clubs - 2, 2, 2, 2, 1, 1. Sports - 1, 1, 1, 1, 2, 3. Scholarship - 3, 3, 3, 3, 3, 2.

School B males with parents' education scores of two through seven: Clubs - 2, 2, 2, 3, 2. Sports - 1, 1, 1, 1, 1. Scholarship - 3, 3, 3, 2, 3.

School A females with parents' education scores of eleven through fourteen: Clubs - 1, 1, 2, 2, 2, 3, 1, 1. Sports - 2, 3, 3, 3, 3, 3, 3, 3. Scholarship - 1, 1, 1, 1, 2, 2, 2, 2.

School B females with parents' education scores of eleven through fourteen: Clubs - 2, 2, 2, 2, 2, 2, 2. Sports - 1, 1, 1, 1, 1, 1, 1. Scholarship - 3, 3, 3, 3, 3, 3, 3.

School A males with parents' education scores of eleven through fourteen: Clubs - 2, 2, 2, 2, 2, 2, 1, 1. Sports - 1, 1, 1, 1, 1, 1, 2, 3. Scholarship - 3, 3, 3, 3, 3, 3, 3, 2.

School B males with parents' education scores of eleven through fourteen: Clubs - 3, 3, 2, 2, 2, 2, 2. Sports - 1, 1, 1, 1, 1, 1, 1. Scholarship - 2, 2, 3, 3, 3, 3, 3.

(9) How would you describe the most popular teachers in this school? School A females with parents' education scores of two through seven: "They're more like the kids. . . . They understand us. . . . They try to help us and don't put us down. . . . They get involved with students even out of school. . . . Students work harder for them. . . . They're more relaxed with the students. . . . They're good teachers. . . . They understand students and try to put themselves in the student's place. . . . They're active in everything. . . . They help students with problems. . . ."

School B females with parents' education scores of two through seven: "They talk to students. . . . They're honest, friendly, and don't embarrass students. . . students can talk to them. . . . They're challenging, interesting, demand attention in class. . . . They're interested in students and in their work. . . . They listen and learn too. . . . They would rather help than discipline. . . easy to get along with. . . . He understands us. . . ."

School A males with parents' education scores of two through seven: ". . . jolly, patient, more involved with students. . . . They explain material thoroughly. . . . They act like they care about students. . . . They try to get you to do your work. . . . They require a certain amount of work in class. . . . They're helpers. . . . They're thirty to forty years old. . . . They're young. . . . They're good. . . . They explain things in class. . . . They help everybody, everywhere, any way they can. . . ."

School B males with parents' education scores of two through seven: "They're easy to get along with. . . . They kid with students. . . . They're sociable. . . . They go out of their way to help. . . . They bend the rules a little to give you a break. . . . They don't have assigned seats and let you chew gum. . . . They're strict when they need to be but, they don't overdo it. . . . They're young. . . . They know what's happening. . . . They don't hassle you. . . . You get what you earn. . . ."

School A females with parents' education scores of eleven through fourteen: "They're involved. . . . They're interested in what students do. . . . They're more like friends than teachers. . . . They listen to you and they make you work in class. . . . They're young, athletic. . . . They have a flexible personality. . . . They can be forceful when they have to. . . good friend you can talk to. . . . They're teachers who are involved. . . . They are young in attitude. . . . They're accessible. . . helpers. . . ."

School B females with parents' education scores of eleven through fourteen: "They're kinda young, outgoing. . . . They have different ways of teaching. . . . We're always busy in their class. . . . You learn more in their class. . . easy to get along with. . . . They try to bring you out and make you think for yourself. . . . They're concerned about students outside the classroom. . . . He's very organized. We use the whole class period. . . . They assign responsibility to students. . . easy going. . . . They take time to listen. . . . They don't try to rock the boat. . . . She is a sarcastic bitch. . . . He works kids hard. . . ."

School A males with parents' education scores of eleven through fourteen: "They're young, active. . . . They talk to students. . .

concerned about students. . . . They get involved in club sponsorship. . . . They have a good humor and are open minded. . . . They're receptive to new ideas and to criticism. . . . They accept you even if you disagree with them. . . . They're younger. . . . They're honest. . . . They're friendly and seem to care about students. . . . They teach good. . . ."

School B males with parents' education scores of eleven through fourteen: "They talk to you and help you. . . . They will be friendly with you. . . . They would rather help than get you in trouble. . . . They're young and oriented toward students. . . . They have good ways of teaching. . . . They have interesting presentations and get student participation. . . . They're pretty friendly. . . . They give you breaks. . . . They listen to the students' side. . . . They don't mind talking to students. . . . They give you the benefit of doubt when you need it. . . . They're younger. . . . They understand more of the things around school. . . . They're helpers rather than condemners. . . ."

(10) How would you describe the most unpopular teachers in this school?

School A females with parents' education scores of two through seven: "We are always wrong. . . . We're dumb. . . . They never praise us. . . . They never trust us. . . . They're always grouchy. . . . They act like they don't want to help us when we need help. . . . They play favorites. . . . They don't try to understand us. . . . They're hard. . . . They're just there to teach and that's it. . . . They don't go out of their way to help. . . . They expect kids to do more. . . . They push us to the limit. . . ."

School B females with parents' education scores of two through seven: "They're sarcastic, rude and embarrass students. . . . They think they are better than students. . . . They make up tests with ambiguous questions and won't answer our questions. . . . They're younger. . . . They try to act like students. . . . They play favorites. . . . They're monotonous and too strict. . . . He yells at us in the hall. . . super hard teacher. . . material is hard and she makes it harder. . . one test for the whole grade for six weeks. . . ."

School A males with parents' education scores of two through seven: "They're unorganized. . . . They just talk, talk, talk and we don't learn anything. . . . He strays off the subject. . . . He gripes at a few students all of the time. . . . They have pets. . . . He's old, set in his ways. . . . They don't see the students' point of view. . . . They demand respect. . . send kids to dean's office for just any little thing. . . ."

School B males with parents' education scores of two through seven: ". . . goes strictly by the book. . . give hard work. . . prejudiced. . . assigns seats. . . give us a bunch of don'ts. . . give lots of homework. . . old, old fashioned, out of date. . . sit down, shut up. I'm the boss. Nobody tells me what to do. . . ."

School A females with parents' education scores of eleven through fourteen: ". . . very short tempered. . . give referrals for the least little thing. . . . They're not eager to listen. . . They're always right and the students are always wrong. . . . They show favorites. . . . They talk down to us like we are below their level of intelligence. . . old, slow. . . . They don't talk to you in the hall. . . . They do all of the talking in class. . . . There are no alternative methods for students, just the teacher's method. . . old, closed minds. . . teacher is superior to kids. . . . Kids' ideas are not as acceptable as the teacher's. . . ."

School B females with parents' education scores of eleven through fourteen: "They're just here to give busy work. . . . They can't wait until the end of the day. . . . They don't stick to the subject. . . . They're boring. . . . They don't have discipline. . . . They waste students' time. . . . They're poorly planned. . . . They're fun people, but not serious about what they're doing. . . . They give easy assignments and don't challenge students. . . . They make unrealistic assignments. . . . They keep closed gradebooks so you don't know where you stand. . . one that tries to be one of the kids. . . she goes off and gets stoned with the kids. . . .

School A males with parents' education scores of eleven through fourteen: "They're emotional, moody and put down our generation. . . . They prejudge. . . . They're not open minded. . . . They argue rather than discuss. . . boring. . . . They don't keep their word. . . . They think their course is the only one we're taking. . . . They're older, more conservative. . . . They're on your back all the time. . . grumpy. . . . They really shouldn't be teaching. . . ."

School B males with parents' education scores of eleven through fourteen: "They're bitches. . . . They don't listen to you. . . . They brush you off when you try to talk to them. . . . They don't try to help you. . . . They put themselves above you. . . snobbish, stuck up. . . crabby. . . . They yell at you. . . . They don't talk to you. . . . They won't give you a break. . . . They don't help. . . . They'd rather throw students in the office than help them out. . . ."

(11) Who do you think likes the principal the best, boys or girls? Why?

School A females with parents' education scores of two through seven:

Girls - 6. "Girls understand better than boys. . . . Girls are more sympathetic. . . . Girls are more mature. . . . Boys don't understand the reasons why the principal has to do the things he does. . . . Girls like men more than boys do. . . . Boys find more fault with the principal. . . ."

Boys - 0.

School B females with parents' education scores of two through seven:

Girls - 4. "Boys don't like authority. . . . He's always at pep rallies and he'll talk to you. . . . Most of my friends seem to like him. . . ."

Boys - 1. "Boys are less perceptive. . . ."

School A males with parents' education scores of two through seven:

Girls - 3. "The cheerleaders like him and build him up. . . . Boys get disciplined more than girls. . . . Most hippies don't like him. . . ."

Boys - 2. "He did a good job with the riot and I like the way he handled the selection of the school song and what he did about the school flag. . . ."

School B males with parents' education scores of two through seven:

Girls - 3. "He has no contact with students. . . ."

Boys - 2. "He's one of us. . . . We've got to stick together. Women are cutting us down. . . ."

School A females with parents' education scores of eleven through fourteen:

Girls - 6. "He's more friendly to girls. . . . Girls think he is more fair. . . . Guys are conditioned to believe principals are bad. . . . He's a fatherly image to girls. . . ."

Boys - 1. "He helps boys who are in trouble. . . . He's like a big brother. . . . He talks man to man with boys. . . ."

School B females with parents' education scores of eleven through fourteen:

Girls - 3. "Girls compain less. . . . Girls are more forgiving. . . ."

Boys - 3. "He is really hepped up on football. . . . He takes more interest in boys sports. . . . He attends boys' sports. . . ."

School A males with parents' education scores of eleven through fourteen:

Girls - 2. "He is a symbol of authority. . . . Girls are less condemning than boys. . . ."

Boys - 5. "He's sports minded. . . . He's liberal and will give you a break. . . . He's friendly and has a good sense of humor. . . . He doesn't take the teachers' word for everything. . . ."

School B males with parents' education scores of eleven through fourteen:

Girls - 4. "Simply the fact that he is a man. . . . I've seen more girls talk to him than boys. . . ."

Boys - 3. "All he talks to or about are sports, football players, cheerleaders and the Student Council president. . . . He's pretty friendly to guys. . . . He helps them out when they need it. . . . He attends football and basketball games. . . ."

(12) What should the school do to help students get to know each other better?

School A females with parents' education scores of two through seven: "I don't think the school can do anything. . . . Give students more time together. . . . Get the hippies and the rah rahs together. . . Have formal sessions with a younger teacher present. . . . Have a big get-together party with everybody. . . ."

School B females with parents' education scores of two through seven: "It's not up to the school. It's the kids' fault. . . . There are too many groups; hippies, red necks, popular kids, and the stand backs. . . . I don't think there is much they can do. Kids don't associate with each other. . . ."

School A males with parents' education scores of two through seven: "I think the school has done a good job. They can't do much more. . . . Start a hippie club. . . . Give more activities other than clubs. . . . Have big group gatherings. . . ."

School B males with parents' education scores of two through seven: "They can't do anything. . . . There's no school spirit here. . . . Have more interesting assemblies. . . . Get students together to discuss school problems. . . . Go on field trips. . . . Sponsor dances. . . ."

School A females with parents education scores of eleven through fourteen: "They're doing all they can. . . . The opportunities are there. . . . Have more discussions in classrooms. . . . Have rap sessions with only the teachers that the students invite there. . . . I don't think it's up to the school. It's up to the students. . . . There is too much conflict between the hippies and the rah rahs. . . ."

School B females with parents education scores of eleven through fourteen: "Give the activity period back to us. . . . Have more functions of the school as a whole, such as dances. . . . It would help if the classes could do more things together. . . ."

School A males with parents' education scores of eleven through fourteen: "I don't think the school can do anything. . . . We need a more effective means of making announcements so we know about the student activities. . . . It's not part of the school's responsibility. It provides enough chances. . . . It's not the school's job. It's the students' fault. . . ."

School B males with parents' education scores of eleven through fourteen: "Have a few more activities. . . . Clubs separate more than help. . . . Have more group activities. . . . Provide light entertainment such as movies for non-club participants. . . . Have more pep rallies. . . . More out of school activities, such as tenth grade bonfires. . . . School does about all it can. Students just don't care. . . ."

(13) If you could make a suggestion or send a message to the principal without him knowing where it came from, what would you tell him?

School A females with parents' education scores of two through seven: "Provide a smoking area because we can't use the bathrooms. . . . Have more educational assemblies rather than rock groups. . . . Teachers tell us we can't use the senior court during activity period and we just have to sit in homeroom during activity period. Let us have the senior court back. . . . Eliminate lunch period and let school out early. . . . Try to get people in one group instead of a lot of different groups. . . . Put more responsibility on seniors to set examples and to monitor student behavior. . . ."

School B females with parents education scores of two through seven: "I've enjoyed my three years here. . . . Enforce the rules for everybody or don't have the rules. . . . Let us get to know you better as a person. . . . Be more friendly. Speak in the halls. . . . Give us more chances to make suggestions. . . ."

School A males with parents education scores of two through seven: "Keep the parking lot cleaner. . . . Keep smoke out of the bathrooms. . . . You messed up our parking lot. . . . Give us more than thirty minutes for lunch. . . . Find out what the teachers are doing in the classrooms. . . . Tell us how school is going, not just bad news. . . . Keep students from tearing up library books. . . . If you're not going to stop the smoking in the bathrooms stop griping about it. . . . I like the way the school is run. . . ."

School B males with parents' education scores of two through seven: "Get out and know the students, not just the good students and the trouble makers. . . . Know all the students. Be like the assistant principal, he knows everybody. . . . Try to have more interesting activities. . . . I'd like to have an open campus so we could come only when we have class. . . . Good job. . . . I don't always agree, but somebody's got to make the decisions. . . . Students have been told for three years that we would get a smoking lounge. All three Student Council presidents have told us they would try to get us one. We would like to have one. . . ."

School A females with parents' education scores of eleven through fourteen: "Let us use our I. D. cards to get into the library at lunch. . . . Open the courts more often so we can use them. . . . Crack down on the ones who smoke in the bathrooms. . . . Open campus for lunch is great. . . . We don't have enough parking space. . . . You're doing a pretty good job. . . . The cafeteria is too noisy. . . . Keep plugging. . . ."

School B females with parents' education scores of eleven through fourteen: "Try to get to know the kids better. . . . Try to help the students instead of quoting the rulebook. . . . Approach problems with a positive attitude. . . . Take more time for students. . . . Stand up for what students want to the extent feasible. . . . Bend a little, don't be so stubborn. . . .

Have better relationships with the faculty. . . . Be less preoccupied with politics and downtown and more concerned about students. . . ."

School A males with parents' education scores of eleven through fourteen: "Eliminate smoking and vandalism in the bathrooms. . . . I think you're right in letting us have our rock concerts. . . . Classify all assemblies so students will know what kind of behavior is expected. . . . Make provisions so all students get their activity cards. . . . Make sure that teachers read the announcements. . . . Keep us informed about school board policies. . . . I would like to see classes segregated by grade levels. . . . Raise the academic standards a little bit. . . . Academic standards should be raised in elementary and junior high school. . . . Form clean up committees instead of giving swats. . . ."

School B males with parents' education scores of eleven through fourteen: "Schools don't meet the needs of individuals. . . . You can miss three weeks of some classes and catch up in one week. . . . I'd like to see more pep rallies. . . . Be better informed about racial problems at school. . . ."

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BIOGRAPHICAL SKETCH

Kenneth McCarty Matthews was born March 5, 1940 at Port Mayaca, Florida. He graduated from Martin County High School at Stuart, Florida in 1958. In the Fall of 1958 he enrolled in the University of Florida and received a Bachelor of Science degree with a major in mathematics from that institution in June of 1962. From August 1962 until the end of the school term in 1967 he taught mathematics and science in Okeechobee High School at Okeechobee, Florida. While teaching in Okeechobee High School he attended Florida Atlantic University evenings and summers to receive a Master of Education degree with a major in administration and supervision in 1966. From July 1967 through June 1969 he served as curriculum specialist and assistant director of the Indian River Regional Educational Development Council at Vero Beach, Florida. In July of 1969 he was appointed as Superintendent of Schools for Okeechobee County, Florida and served in that capacity until July of 1971. In July of 1971 he was appointed as principal of Lake Butler Elementary School at Lake Butler, Florida and served in that position until the Fall of 1972 when he enrolled in the University of Florida.

Kenneth McCarty Matthews is married to the former Frances Miriam Thomas and the father of one daughter, Kimberly.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

Ralph B. Kimbrough

Ralph B. Kimbrough, Chairman
Professor of Educational
Administration

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Education.

Michael Y. Nunnery

Michael Y. Nunnery
Professor of Educational
Administration

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John H. James

John H. James
Professor of Business Administration

This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate Council, and was accepted as partial fulfillment of the requirements for the degree of Doctor of Education.

August, 1974

B. L. Sharp by MC Baker

Dean, College of Education

Dean, Graduate School